

1993

STREETSCAPE DESIGN MANUAL



CITY *and* COUNTY *of* DENVER

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I N T R O D U C T I O N



Mayor Speer inspecting tree distribution at the North Denver Station, April 22, 1911. The annual "Tree Day" Event was begun in 1905 to beautify the City and encourage civic pride. Denver was the first city in the country to give away trees to its citizens. *Courtesy Denver Public Library, Western History Department, L.C. McClure.*

A LEGACY OF BEAUTIFUL STREETS

Denver has a rich legacy of parks, parkways, and tree-lined streets. Efforts to create a green oasis date from 1867, when residents first planted street trees. Parks were established early to add beauty, improve values, and give relief from the climate. Early in this century, the city commissioned a series of park and parkway plans, all of which included great parks connected by

tree-lined parkways, formal landscaping, monuments, and the celebration of water. Residents and visitors alike benefit from this legacy.

The last major park and parkway plan (1927) extended the system throughout the city and emphasized tree-lined streets for residential neighborhoods. Today, Denver's civic character is expressed in this system of green streets and neighborhoods.

WHERE TO PLANT TREES ON STREET

On curbed streets, trees should be planted an equal distance between sidewalk and curb. Where there is no curb, trees should be planted as follows:

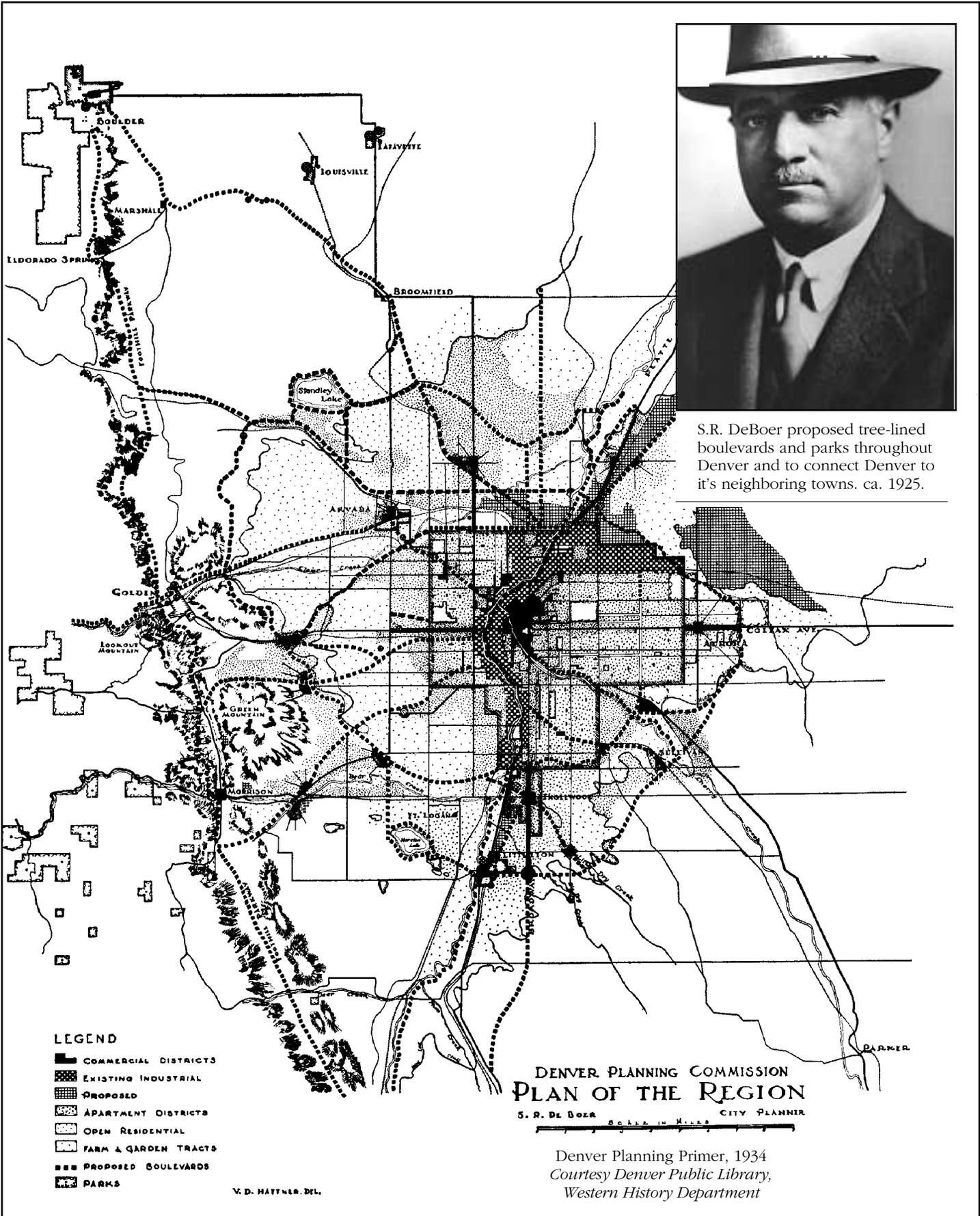
- On 60 foot street, 11 feet from lot line.
- On 80 foot street, 17 feet from lot line.
- On 100 foot street, 20 feet from lot line.

Where there are car tracks on street, plant trees about four feet nearer to the lot line than above. In blocks where trees are already planted, try to conform to the same line.

Planting Instructions from the City Forester, 1912: *Denver Municipal Facts*



S.R. DeBoer proposed tree-lined boulevards and parks throughout Denver and to connect Denver to it's neighboring towns. ca. 1925.



DENVER PLANNING COMMISSION
PLAN OF THE REGION

S. R. DE BOER CITY PLANNER

Denver Planning Primer, 1934
 Courtesy Denver Public Library,
 Western History Department



Left: Neighbors plant trees for street beautification project at Sixth Avenue and Josephine Street. Arbor Day 1991.

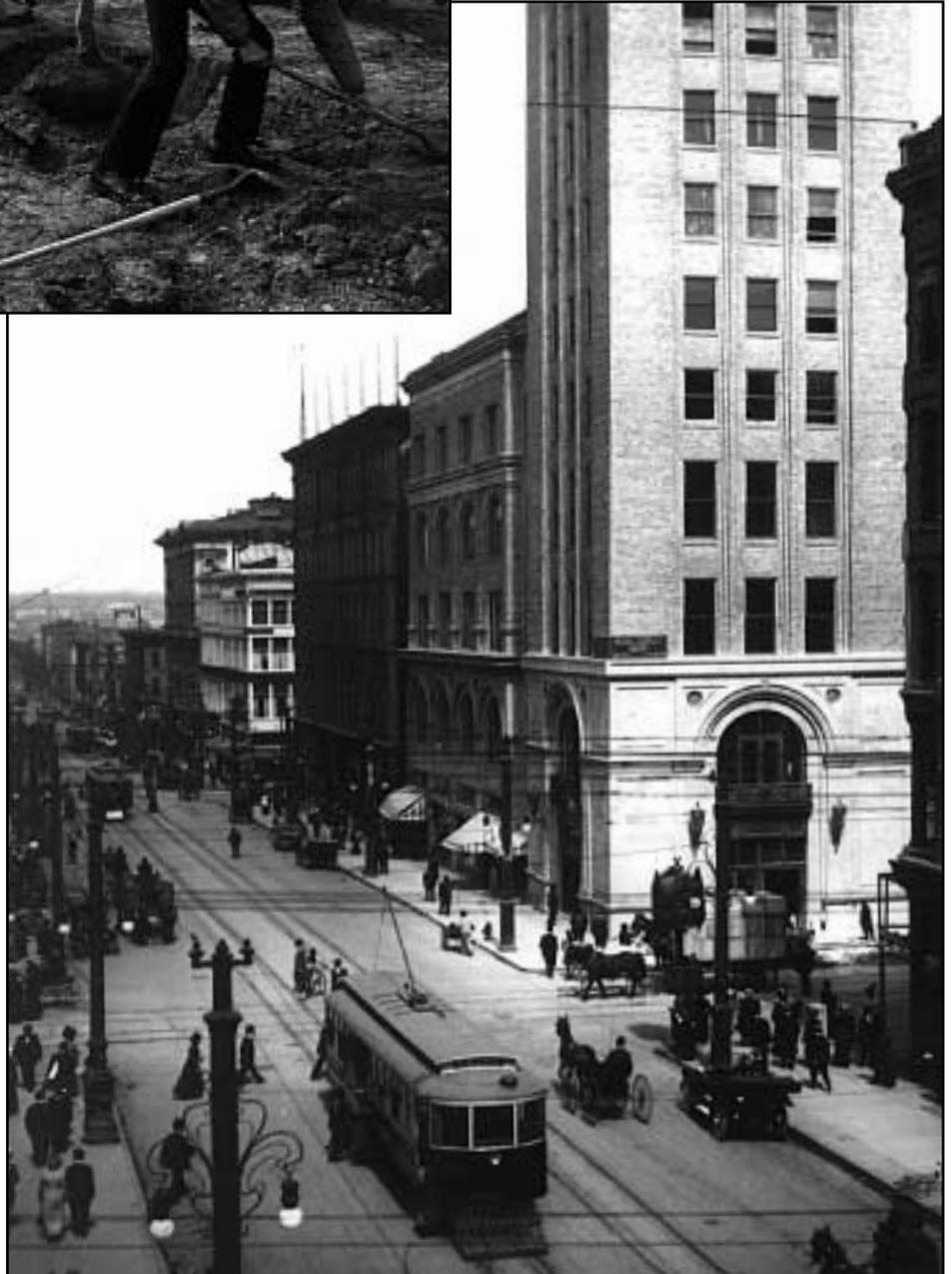
Below: Decorative street lights and trolley cars created a unique identity for Denver's commercial center along 16th Street. ca. 1912.

Courtesy Denver Public Library, Western History Department, L.C. McClure.

Denver's most beautiful neighborhoods have consistent plantings of street trees that buffer and connect all homes in a shared common space. These streets are some of the most important public spaces in the city, creating a strong sense of community. The importance of beautiful streets was renewed in the 1989 Denver Comprehensive Plan, which states:

"The street tree will once again be Denver's civic symbol. The oasis image will be reinforced by reemphasizing street tree planting and replacement, and by continuing the tradition of tree lawns and detached sidewalks, especially along major streets."

Beautiful commercial streets are a Denver tradition as well. Today there is a growing interest in restoring beauty to our commercial streets. If streetscapes are comfortable and secure for people, pedestrian activity will increase. The recent Lower Downtown and Cherry Creek North streetscape projects are good examples of how lights, trees, paving, signage and furnishings can enhance and improve the vitality of a commercial area.



The best designs give unity to a district by using consistent, formal arrangements of streetscape elements suited to the scale and character of the district. Each should also share common materials and

elements with similar districts throughout the city. When this is achieved, every district can have a sense of place that contributes to an overall attractive image for Denver.



Denver Residential Street; Belcaro Neighborhood.



Denver Commercial Street; South Broadway Business Corridor.

CONTINUING THE LEGACY

New development, age and disease have caused our legacy to deteriorate. The system of beautiful streets is in jeopardy. This manual calls for re-creating and expanding the legacy to meet tomorrow's needs. The design of streets contributes greatly to the beauty and liveability of our city. As redevelopment changes older parts of the city, the legacy must be renewed.

Residential streets are those where a predominance of the uses are residential, whether single or multi-family. These guidelines are intended to reestablish the traditional beauty of Denver's residential neighborhoods. Replacing street amenities where lost and

extending them consistently into new neighborhoods are the highest objectives of this manual.

Commercial streets are those where the predominance of uses are business, retail, or office. Good streetscape design will also improve the image of a commercial district by unifying paving, lighting, plantings and furnishings. A unified streetscape will give a distinctive character that sets the district apart from others.

Most commercial districts suffer from a mix of building styles, pavements, signs and other elements. Sometimes these changes are so disruptive that the area looks chaotic and no longer presents a good image to the customer. When this happens, a new

streetscape can do a lot to restore the image of a comfortable, healthy area offering with quality goods and services. A more competitive district and new customers often follow a new streetscape development.

Many elements work together to create a successful streetscape. Street trees, sidewalks, lighting, comfortable seating, easy to read signs, convenient parking and other amenities tell the customer that the owners care about them. A good design organizes these elements to give drivers a view of shops and to create a pleasant, safe zone for pedestrians, where people notice the businesses instead of the traffic. When streetscaping is successful, a new sense of pride is evident.



Cherry Creek North before streetscape improvements, 1987.



Cherry Creek North after formation of a Business Improvement District and completion of a district-wide streetscape project, 1989.

P U R P O S E

The purpose of this manual is to make the city's guidelines for the design of streets clear. If this purpose is fulfilled, Denver will become a more desirable, liveable city for residents, business people, shoppers and visitors.

WHO SHOULD USE THIS MANUAL

Property owners, developers, business people, merchants, designers and city staff are charged with applying this manual to all design and construction efforts in the public right-of-way. Every new improvement should comply with or respond to these guidelines appropriately. Not covered here are roadway design and projects that are covered under separate guidelines or plans approved by the Planning and Community Development Office, including regional commercial districts and other special locations such as the 16th St. Mall.

The guidelines apply to the activities of numerous city agencies including the City Forester's Office, the Parks and Recreation Department, the Planning and Community Development Office, the Transportation Division of the Public Works Department and to other agencies such as The Regional Transportation District, Colorado Department of Transportation, Public Service Company, the Metropolitan Sanitation District and the Denver Urban Renewal Authority. Unified application of the guidelines will insure consistent streetscape design of future projects located within the public right-of-way.

HOW TO USE THIS MANUAL

This manual is a tool for expanding the legacy of beautiful streets

in Denver. It is not a plan for expanding the parkway system, but it is important that each new project or design effort consider the role of the street in the overall system: Was the street once a parkway? Is it a through-street which connects neighborhoods, districts, destinations or parks? Does the street have any unusual characteristics, such as diagonal alignment? Are there existing streetscape elements which should be reinforced or patterns which should be continued?



Pennsylvania Avenue, 1933.

If the answer to any of these questions is yes, the design effort should be extended to define the best solution for the entire length of the street in the district. In such cases it is important to work closely with the Denver Planning and Community Development Office and Transportation Division of the Public Works Department prior to commencing design.

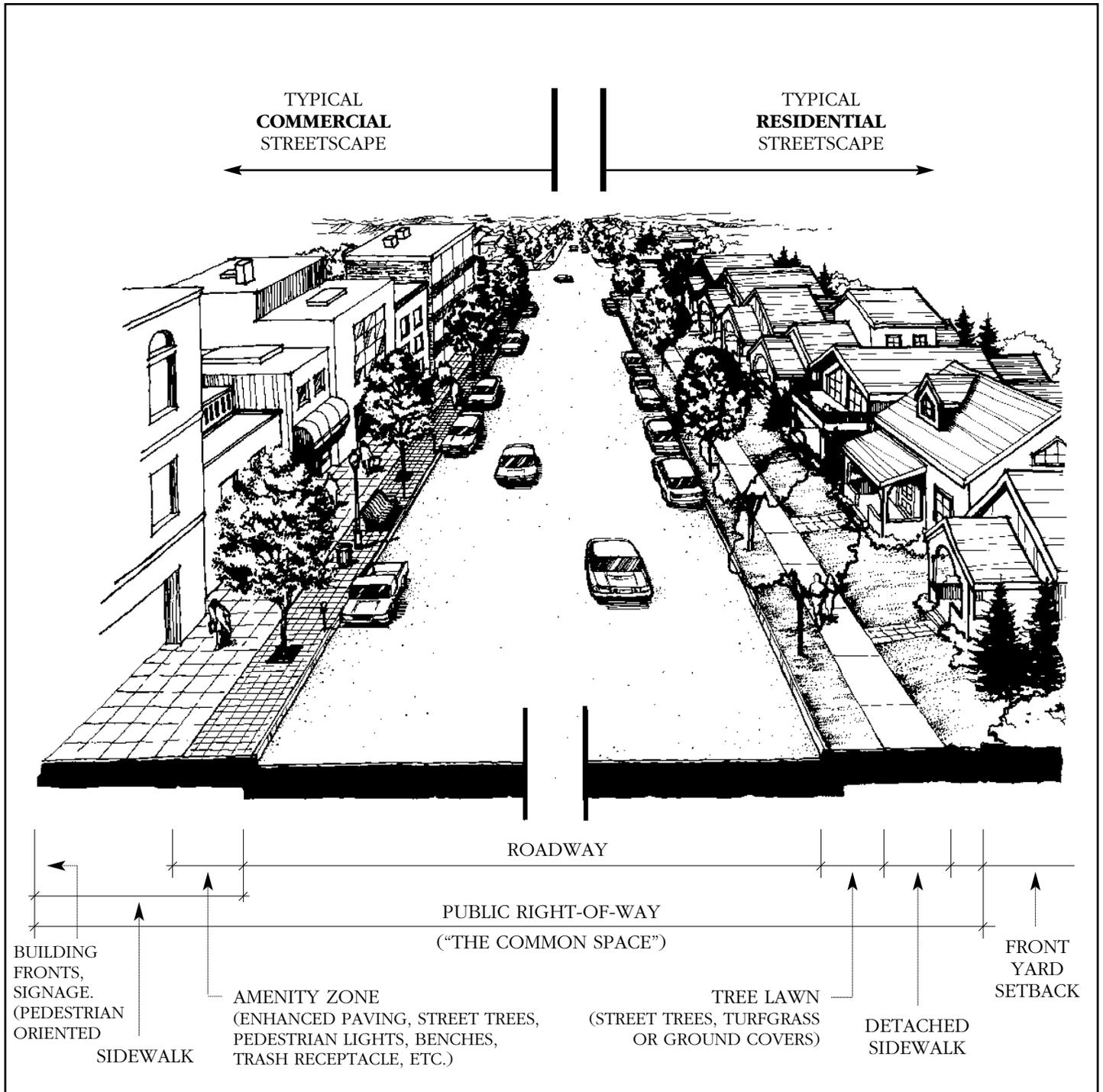
This Manual gives owners guidance in the design and maintenance of streetscape improvements within the public right-of-way. It's jurisdiction does not encompass improvements within private property, but especially on commercial streets should influence landscaping elements such as plants, street furniture, screens, and walls outside the edge of the right-of-way. This manual also addresses the

character and scale of commercial buildings and signage, since buildings in commercial districts often face the street adjacent to the right-of-way line. Thus, building designs significantly influence the quality and character of a streetscape.

It is important to determine if other planning has been performed in the area prior to beginning new design. Neighborhood, commercial or historic district plans may be in place, or goals and objectives may have already been established. Generally speaking, projects within special districts require review before a design review committee, based upon established guidelines. Streetscape projects within historic districts or adjacent to landmarks must be reviewed before the Denver Landmark Commission. These plans may provide more detailed or specific information about local improvements, but the spirit of beauty and quality urban design identified here should be applied everywhere. This document is a foundation for all streetscape projects, whether or not they are within special districts. Its design and technical principles underlie streetscape design throughout the city. Each project should examine local conditions and apply the guidelines within that context. Improvements to commercial streets should occur in a coordinated fashion involving all the owners on a block or within the commercial district to create the most unified image possible.

GUIDELINES VS. STANDARDS

As a guideline document, this handbook is not all-inclusive and is not intended to preclude the designer's creativity. Nor may it be possible to meet every condition



The intent of this drawing is to clarify the physical boundaries of the Right-of-Way and elements within it. Streetscaping is typically limited to the ROW. However, building facades, signage, fences, walks, setback, etc. contribute to the character of the public common space.

in the manual. However, it is possible to find design solutions which meet its intent. And while every condition is not addressed, design concepts and materials are defined. The majority of the guidelines in the manual are strongly recommended and should be fol-

lowed whenever possible. The remainder are city standards and must be followed. The standards are underlined. When specific conditions are not covered here, contact the agencies listed in the Agency Directory.

RELATED DOCUMENTS

Other guidelines may affect the design of any specific project. They are listed in the Bibliography. Contact the appropriate agency for copies and interpretation of each.

DESIGN GUIDELINES

I. STREET TREES

Trees give many benefits to the city. They supply shade, buffer wind, sun and bad views, help clean the air and reduce glare. Street trees are the most important tool for buffering people from cars. They create a pedestrian space, make the street more comfortable and provide beauty year-round. Without street trees, pedestrians are exposed to the sun and the car with little sense of comfort. Street trees are a major part of Denver's pleasant neighborhoods.

On commercial streets, trees are the most significant element that make streets attractive to shoppers. Without street trees, shoppers feel the heat, glare, dust and pollution of the roadway. With them, the harshness of a paved environment is alleviated and pedestrians can enjoy the shade, beauty and amenity that is essential to a pleasant shopping experience. A formal, repetitive use of trees is recom-



A tree-lined 17th Avenue Parkway, shortly after the turn of the century.
Courtesy Denver Public Library, Western History Department.

mended to unify districts and create a continuous pedestrian scale suited to storefronts.



Columnar Norway Maples at Larimer Square.



Street trees make the shops at 2600 West 32nd Avenue a comfortable place to stop or window shop.

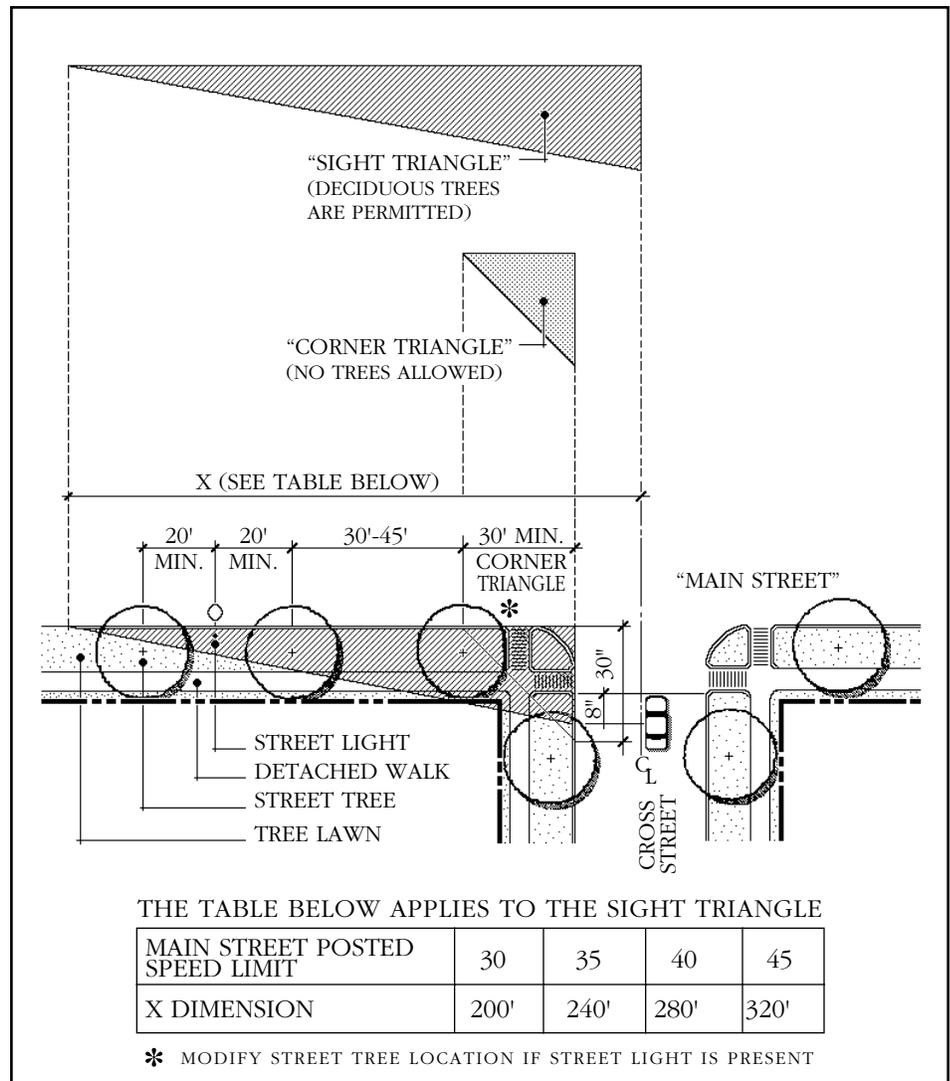
A. DESIGN

GUIDELINES

Design for street trees should respond to the uses on the street. In residential streets, trees in tree-lawns are recommended. In most areas, the same species should be planted on a block. Different species with similar characteristics, such as form and color may be alternated in a regular pattern to avoid over-use of one species. The loss of elm trees in the city due to Dutch Elm Disease reflects the danger of extensive planting of a single species.

Many factors affect design in commercial streets, including the volume of pedestrians, the size and orientation of sidewalks, the distance from trees to buildings, the visibility of facades and signs, and the speed and volume of vehicles.

1. Trees should have the same characteristics on both sides of the street. If mixing species, alternate them in a regular pattern.
2. Plant only one species where an area is to be unified. Avoid random changes in species.
3. Select trees that will fit when they are mature. Narrow areas suggest a narrow tree and open areas suggest a wide one.
4. Where tree lawns do not exist, tree grates or pavers are recommended to protect tree roots and pedestrians. Ground covers may be considered in low traffic volume areas.
5. Use tree grates where pedestrian traffic volume is high.
6. Existing trees must be protected during construction. For projects where a number of existing trees need protection, develop a tree protection program and have it approved by the City Forester. Consult the City Forester prior to removing any trees from the right-of-way.
7. A permit is required from the City Forester prior to planting trees in the right-of-way



Intersection Sight Distance Parameters.

Tree Location

Consider mature tree size before planting so that trees have room to grow. Where signs, lights, overhead or underground utilities, utility poles and fire hydrants would limit mature tree size, adjustments in species or location should be considered to minimize excessive pruning.

1. Plant trees with regular spacing in straight rows to create a continuous street edge. Adjust spacing only slightly for driveways and lights.
2. Locate trees in a straight line midway between the curb and detached walk even where the

width of the tree lawn varies.

3. Plant trees 30 to 45 feet on center for most species. Reduced spacing may be appropriate depending on the space and species. Review special conditions with the City Forester.
4. When replacing trees in an existing row, select new trees of similar characteristics to those being replaced, including form, scale, texture and color.
5. Trees should not be planted closer than 30 feet from the curb face at intersections and street corners within the corner triangle. Review with the Transportation

Division to determine specific requirements.

6. Within the Sight Triangle no non-plant materials over 32 inches or plant materials over 6 inches high are permitted except for deciduous trees, traffic control and lighting devices (see diagram - Intersection Sight Distance Parameters).

7. Maintain minimum sight triangle and corner triangle distances for safe view of oncoming traffic and pedestrians.

8. Trees must not interfere with visibility of traffic control devices especially at intersections. Review with the Transportation Division to determine specific requirements.

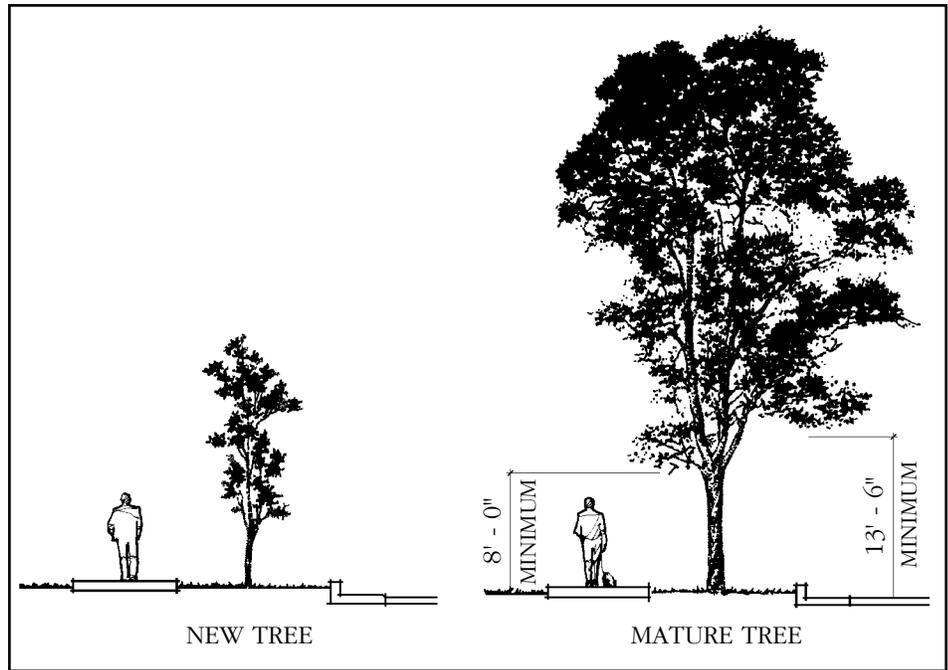
9. At alleys trees should not be located closer than 10 feet from the projected alley property line.

10. Trees should be located a minimum of 42 inches from the face of curb.

11. For commercial and residential streets the minimum distance from street lights is 20 feet for most trees. Individual species and site conditions may warrant a variance if approved by the City Forester, streetlighting design- Transportation Engineering and Public Service Company.

12. At all locations trees should be adjusted slightly to ensure the driver's visibility of regulatory signs.

13. Create a clear walking zone between trees and buildings. In downtown 10 feet is minimum. Distances as low as 5 feet may be possible where space is very limited, however few tree species will be appropriate in such a small area. Trees must be placed far enough away from buildings to allow them to grow without excessive pruning.



Plan adequate room so trees may grow to their mature form without excessive pruning.

T r e e S i z e

Trees should be large enough when planted to add substantial shade and to reach a height appropriate to surrounding buildings. At mature size, residential street trees should form a continuous canopy to reinforce the street space and frame vistas.



Although "attached walks" are strongly discouraged, regular tree spacing along the street will define the common space, and reinforce the historic character of Denver's neighborhoods.

1. Street trees in grates should be 3 inch caliper, minimum, with high branching where pedestrians will be passing beneath the tree canopy. This size is recommended so that

adequate branching height is achievable without severe pruning.

2. Trees in tree lawns should be 2 inch caliper, minimum. Note that under the favorable conditions of a tree lawn, this smaller size tree may soon catch up to the growth rate of a larger tree planted in a grate.

3. The branching height of mature trees on the traffic side of the street should be no less than 13 feet 6 inches above the street.

4. The branching height of mature trees on the pedestrian side of the street should be no less than 8 feet above the sidewalk.

5. Small varieties of thornless and fruitless trees may be used only in median areas or traffic islands where lower branching habit will not interfere with pedestrians, vehicles or driver visibility.

6. Trees within the small street tree category should only be used where power lines overhead would not allow a large street tree to reach maturity without severe pruning.



The historic pattern of regularly spaced trees, centered in the tree lawn separates the sidewalk from the street and provides a safe and comfortable pedestrian space.

Tree Selection

All trees should fit the microclimate, soils, sun, moisture, budget and maintenance environment in which they are planted. This is a major concern in areas with high levels of pollution, salt, snow storage or automobile and pedestrian damage. Trees selected for urban streets should be able to endure pollution, compacted soils, minimal water, and low maintenance.

1. Trees near walks should be thornless and fruitless to minimize maintenance and to reduce pedestrian hazards. They must be strong wooded, resistant to most diseases and insects, single trunked, with upright growth and a medium to long life expectancy. Branches should resist breaking.

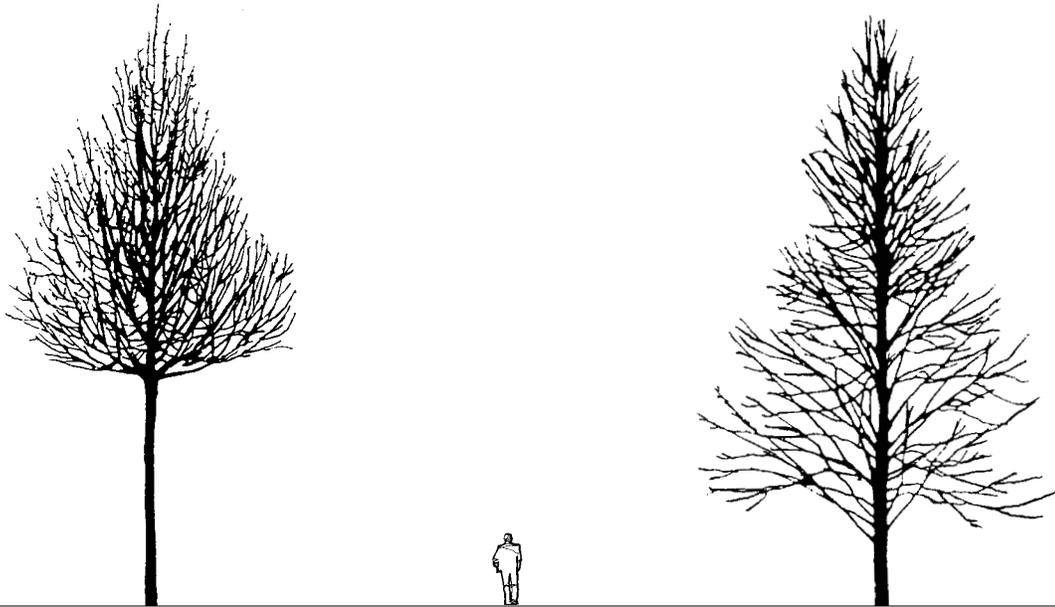
2. Trees and irrigation techniques that require minimal water should be considered. Irrigation must be installed for street trees in all commercial streets. Irrigation must be designed to deliver the appropriate amount of water to each tree with minimum waste. Easily adjustable, automatic irrigation controls are recommended.

3. Along commercial streets, trees should be selected that will minimize the obstruction of views to retail signs. Employ trees with appropriate forms and character. Utilize tree spacing which supports this concept.

B. RECOMMENDED STREET TREES

Denver's unique climate and soils limit the variety of species which are recommended for street tree planting. These species best meet the selection and size guidelines for most conditions and are preferred for their dependability, low maintenance and drought resistance. Watering habits and soil conditions significantly affect the root structure. The City Forester may consider other species where special conditions exist.

PYRAMIDAL FORM



GREENSPIRE LITTLELEAF LINDEN (*Tilia cordata* 'Greenspire')

Mature Height:	40-50 feet
Mature Spread	35 feet
Spacing, Tree Lawn:	30-35 feet
Spacing, Grates:	25-30 feet
Growth Rate	Medium

SPECIAL CHARACTERISTICS:

Single trunk with ascending branching; dark green glossy leaves in summer, yellow in fall; small fragrant yellow flowers in early summer. Prefers moist, well-drained fertile soils but is adaptable. Tolerates air pollution.

REDMOND LINDEN (*Tilia x euchlora* 'Redmond')

Mature Height:	45-50 feet
Mature Spread	25 feet
Spacing, Tree Lawn:	35-40 feet
Spacing, Grate:	30-35 feet
Growth Rate:	Moderate

SPECIAL CHARACTERISTICS:

Dense, pyramid form with ascending branches; large dark green leaves, less glossy than other Lindens. Prefers moist fertile soils but will tolerate dry, heavy soils.

COLUMNAR FORM



COLUMNAR NORWAY MAPLE (*Acer platanoides* 'Columnar')

Mature Height:	50-60 feet
Mature Spread	15 feet
Spacing, Tree Lawn:	30-35 feet
Spacing, Grates:	25-30 feet
Growth Rate:	Moderate/Rapid

SPECIAL CHARACTERISTICS:

Dark green leaves in summer, yellow leaves in fall.
Tolerates air pollution; withstands extremes in soils.
Susceptible to over-watering, and sun scald. Performs best with large areas of grate or planting.

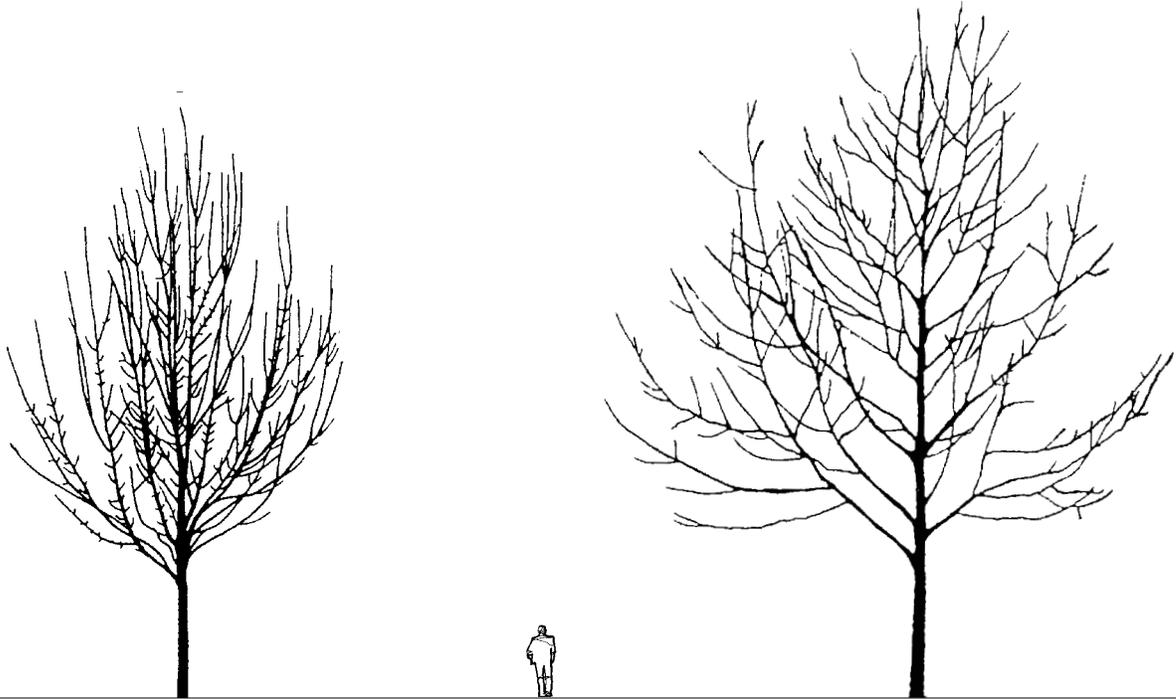
COLUMNAR ENGLISH OAK (*Quercus robur* 'Fastigiata')

Mature Height:	50 feet
Mature Spread	30 feet
Spacing, Tree Lawn:	25-30 feet
Spacing, Grate:	25-30 feet
Growth Rate:	Moderate

SPECIAL CHARACTERISTICS:

Large dark green leaf in summer, brown in fall, persisting through winter with small acorns. Prefers well-drained soils. Should not be over-watered.

OVAL FORM



PATMORE GREEN ASH (*Lanceolata 'Patmore'*)

Mature Height:	40-50 feet
Mature Spread	30 feet
Spacing, Tree Lawn:	30-35 feet
Spacing, Grates:	25-30 feet
Growth Rate:	Rapid

SPECIAL CHARACTERISTICS:

Shiny, green leaves in summer, yellow leaves in fall. Withstands extremes in soils; tolerates salt, drought, and extreme cold. (A second choice would be summit green ash)

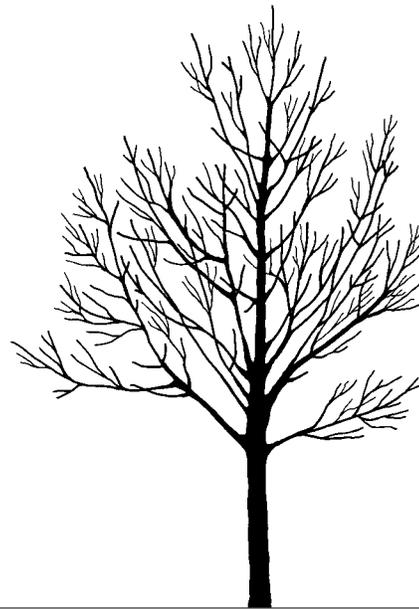
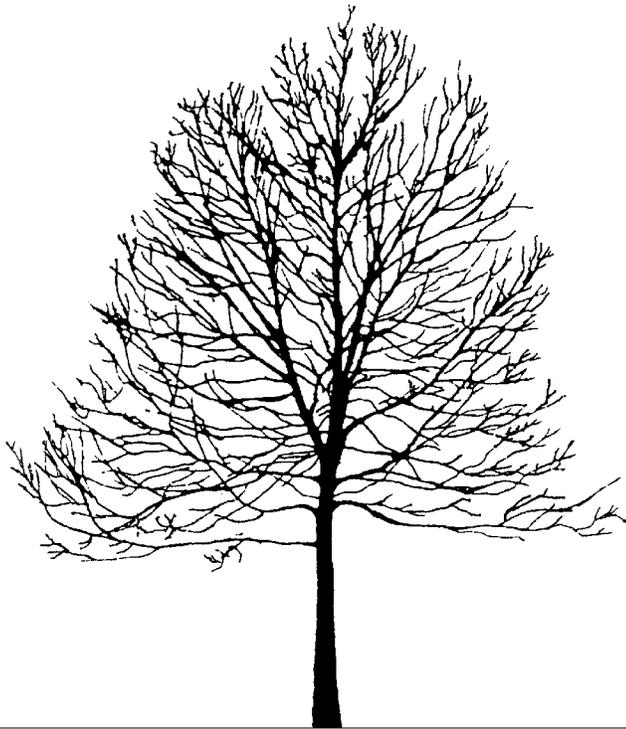
NORWAY MAPLE (*Acer platanoides, 'Schwedler', 'Superform' and 'Emerald Queen'*)

Mature Height:	50-60 feet
Mature Spread	40 feet
Spacing, Tree Lawn:	40 feet
Spacing, Grates:	30-35 feet
Growth Rate:	Moderate/Rapid

SPECIAL CHARACTERISTICS:

Tolerates air pollution; withstands extremes in soils. Susceptible to sun scald. Performs best with large areas of grate or planting. 'Superform' - Dark green leaves in summer, yellow leaves in fall; straight trunk. 'Schwedler' - Purplish red leaves in spring, green in summer, yellow in fall; 'Emerald Queen' - Ascending branches; dark green leaves in summer, bright yellow leaves in fall.

OVAL FORM



COMMON HACKBERRY (*Celtis occidentalis*)

Mature Height:	50-60 feet
Mature Spread	40 feet
Spacing, Tree Lawn:	40-45 feet
Spacing, Grates:	30-35 feet
Growth Rate:	Moderate/Rapid

SPECIAL CHARACTERISTICS:

Medium green leaves in summer, yellow leaves in fall; orange-red to purple drupe in fall; corky bark. Prefers rich, moist soil but grows in all soil types; tolerates wind and air pollution. One of the most drought resistant trees.

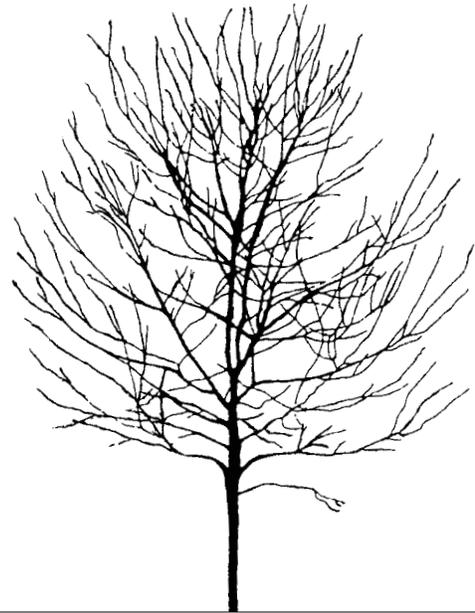
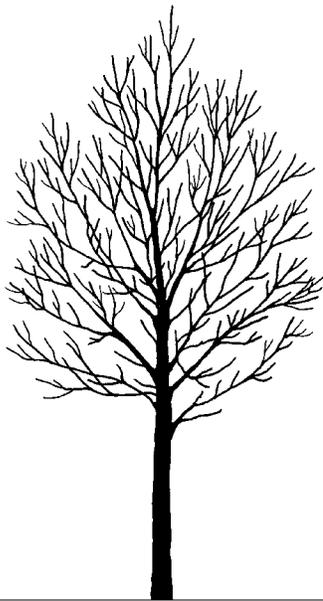
AUTUMN PURPLE ASH (*Fraxinus americana* 'Rose Hill')

Mature Height:	40-50 feet
Mature Spread	50 feet
Spacing, Tree Lawn:	35-40 feet
Spacing, Grates:	25-30 feet
Growth Rate:	Moderate

SPECIAL CHARACTERISTICS:

Shiny, green leaves in summer, maroon leaves in fall; seedless. Withstands extremes in soils; tolerates salt, drought.

OVAL FORM



MARSHALL'S SEEDLESS' GREEN ASH
(*Fraxinus pennsylvanica* 'Marshall's Seedless')

Mature Height:	40-50 feet
Mature Spread	40 feet
Spacing, Tree Lawn:	35-40 feet
Spacing, Grates:	25-30 feet
Growth Rate:	Rapid

SPECIAL CHARACTERISTICS:

Shiny, medium green leaf in summer, yellow leaf in fall. Withstands extremes in soil; tolerates salt, drought.

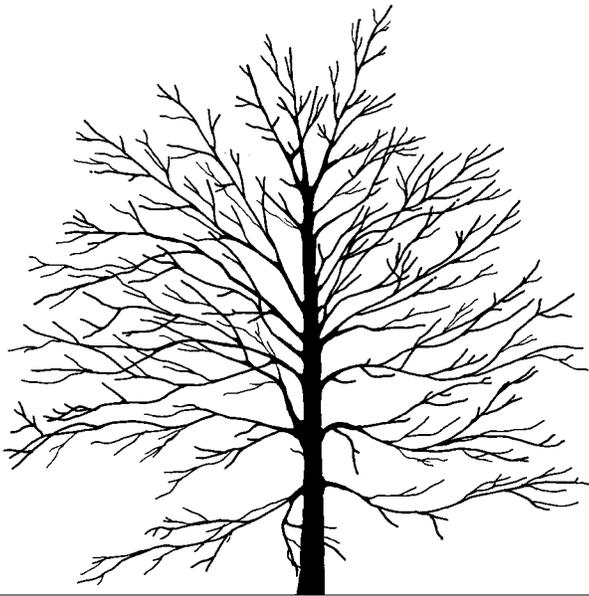
THORNLESS COMMON HONEYLOCUST
(*Gleditsia triacanthos inermis* 'Skyline', 'Shademaster', 'Imperial', 'Moraine' & 'Majestic')

Mature Height:	35-50 feet
Mature Spread	35 feet
Spacing, Tree Lawn:	35-45 feet
Spacing, Grates:	25-35 feet
Growth Rate:	Rapid

SPECIAL CHARACTERISTICS:

Generally, small leaves in leaflets. Withstands extremes in soils; tolerates heat, drought, salt. 'Skyline' - Ascending branches similar in shape to Elm trees, dark green leaves in summer, yellow leaves in fall. 'Shademaster' - Broad shape with ascending branches; same color as Skyline. 'Imperial' - Broad shape with spreading branches; same color as Skyline. 'Moraine' - Broad shape, often with one main trunk splitting into two trunks; same color as Skyline. 'Majestic' - Broad shape with ascending branches; very dark green leaves in summer.

OVAL FORM

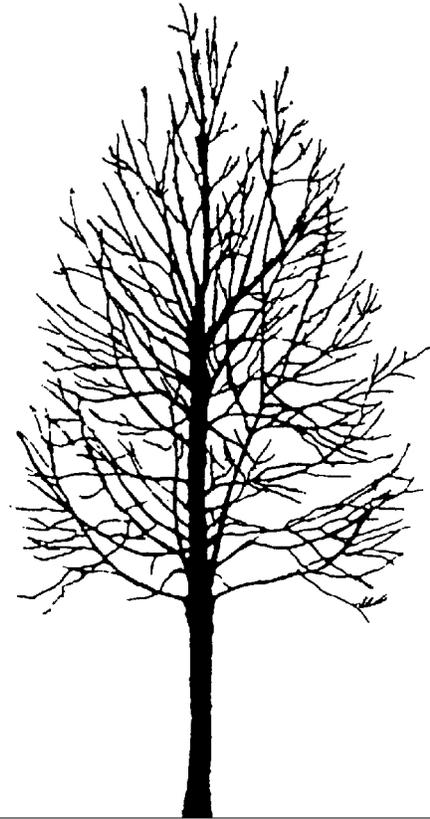


SWAMP OAK
(*Quercus bicolor*)

Mature Height:	50 feet
Mature Spread	40 feet
Spacing, Tree Lawn:	40-45 feet
Spacing, Grate:	35-40 feet
Growth Rate:	Slow

SPECIAL CHARACTERISTICS:

Medium green leaves in summer, yellow in fall, brown persisting on tree through winter; small acorns in fall. Long-lived tree. Prefers moist soil conditions. Requires large open area for growing.



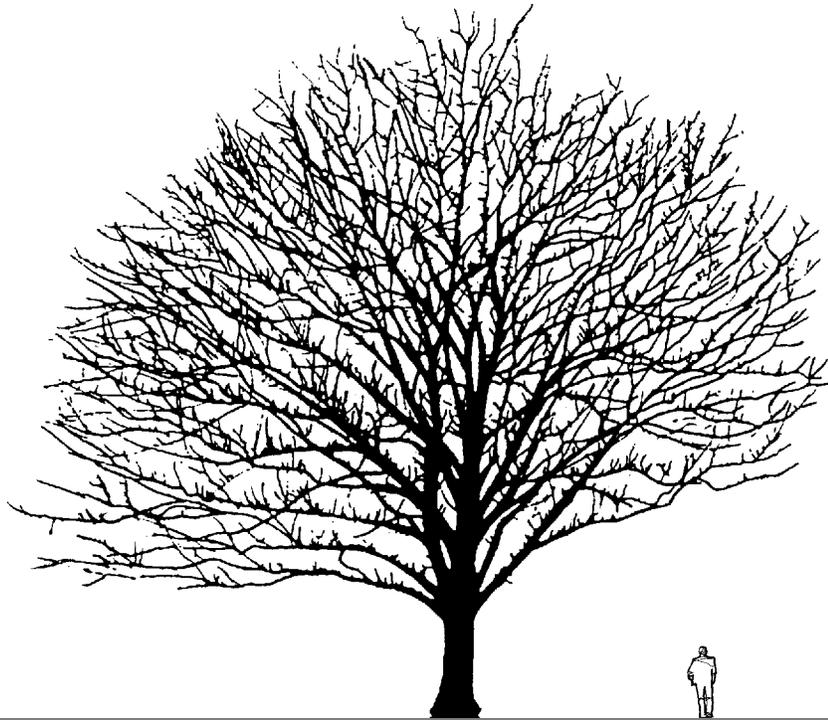
AMERICAN LINDEN
(*Tilia americana*)

Mature Height:	60-70 feet
Mature Spread	50 feet
Spacing, Tree Lawn:	40-45 feet
Spacing, Grates:	30-35 feet
Growth Rate:	Medium

SPECIAL CHARACTERISTICS:

Large, open tree; dark green glossy leaf in summer, pale yellow in fall; small yellow fragrant flowers in early summer. Prefers moist, fertile soils but will tolerate dry, heavy soils. More suited to tree lawns where there is room for the tree to grow large.

OVAL FORM



BUR OAK

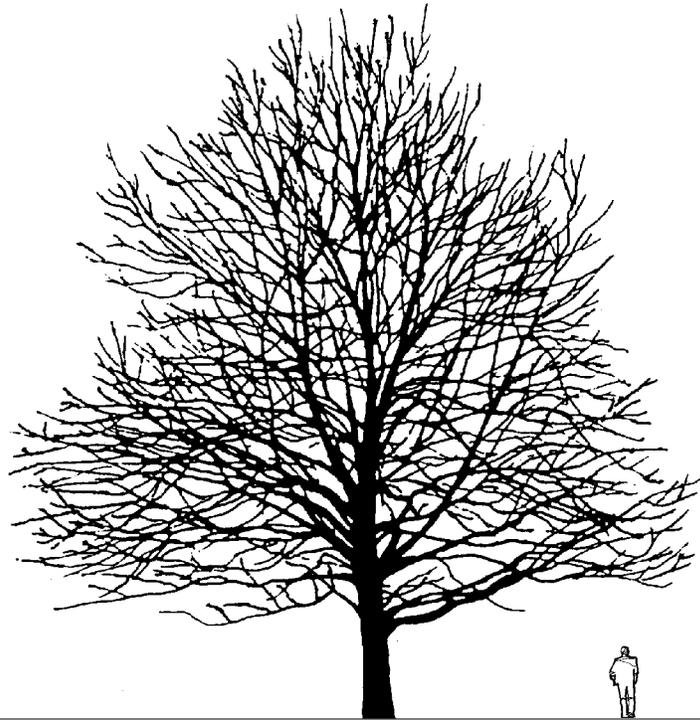
(*Quercus macrocarpa*)

Mature Height:	50-60 feet
Mature Spread	55 feet
Spacing, Tree Lawn:	40-45 feet
Spacing, Grate:	35-40 feet
Growth Rate:	Slow

SPECIAL CHARACTERISTICS:

Dark green leaves in summer, yellow in fall, brown persisting through winter; small acorns in fall. Long-lived tree. Adaptable to various soils; tolerant of heat, drought and air pollution. Requires large open area for growing.

OVAL FORM



NORTHERN RED OAK (*Quercus rubra*)

Mature Height:	50-60 feet
Mature Spread	60 feet
Spacing, Tree Lawn:	40-45 feet
Spacing, Grates:	30-35 feet
Growth Rate:	Moderate

SPECIAL CHARACTERISTICS:

Dark green leaves in summer, russet red in fall. Prefers well-drained sandy loam soil; tolerates air pollution.

OVAL FORM



AMERICAN ELM
(*Ulmus americana*)

Mature Height:	60-80 feet
Mature Spread	50 feet
Spacing, Tree Lawn:	40-50 feet
Spacing, Grates:	35-40 feet
Growth Rate:	Medium

SPECIAL CHARACTERISTICS:

High, arching branches. Grows well in a variety of conditions. American Elms are currently not appropriate street trees due to Dutch Elm disease but they remain one of the most beautiful of trees for street tree use. If new varieties which are resistant to Dutch Elm disease are developed, they should be planted once again. Elms require large areas of grates or planting to thrive.

JAPANESE PAGODA TREE
(*Sophora japonica*)

Mature Height:	50-60 feet
Mature Spread	30 feet
Spacing, Tree Lawn:	35-40 feet
Spacing, Grates:	25-30 feet
Growth Rate:	Moderate

SPECIAL CHARACTERISTICS:

Medium green compound leaves that hold late into the fall. Creamy-white flowers in August, followed by 3 inch long seed pods. Tolerates air pollution, but smaller trees may be sensitive to extreme cold.

C. Trees Allowed

In certain situations, trees other than those in the recommended street tree list above may be appropriate. Consult the City Forester for a current list of trees allowed along the street.

D. Trees Not Allowed

Unless specifically authorized by the City Forester, the following species of trees are prohibited from being planted in the right-of-way.

1. Any of the poplar species (*Populus sp.*)
2. Any of the willow species (*Salix sp.*)
3. The box elder tree (*Acer negundo*)
4. The siberian (Chinese) elm (*Ulmus pumila*)
5. The silver maple (*Acer saccharinum*)
6. Any weeping or pendulous type tree.
7. Any tree with bushy growth habit which cannot be maintained to a single leader or trunk
8. Any shrub which could obstruct, restrict, or conflict with the safe use of the right-of-way.
9. No artificial trees, shrubs, turf or plants may be used in the public right-of-way.

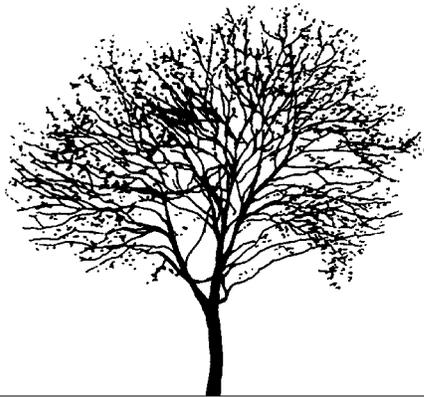
E. Special Use and Small Street Trees

These small trees should generally not be planted as street trees, however they may be used in medians and neighborhood entry marker plantings. The small street tree should only be used where overhead powerlines along the street edge would not allow a large street tree to reach maturity without severe pruning. The list below notes those trees that are not appropriate for use along the street edge while the others may be used both as special use and small street trees. Please follow it carefully.

There is a broad range of shapes and sizes of trees in the list below. Please consult the City Forester prior to planting these trees for specific recommendations.

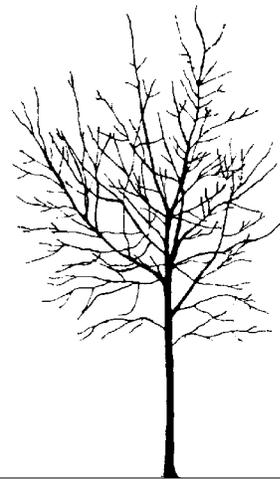


The Esplanade at City Park is an excellent example of Special Use Trees. Crabapple trees create a formal approach on the parkway.



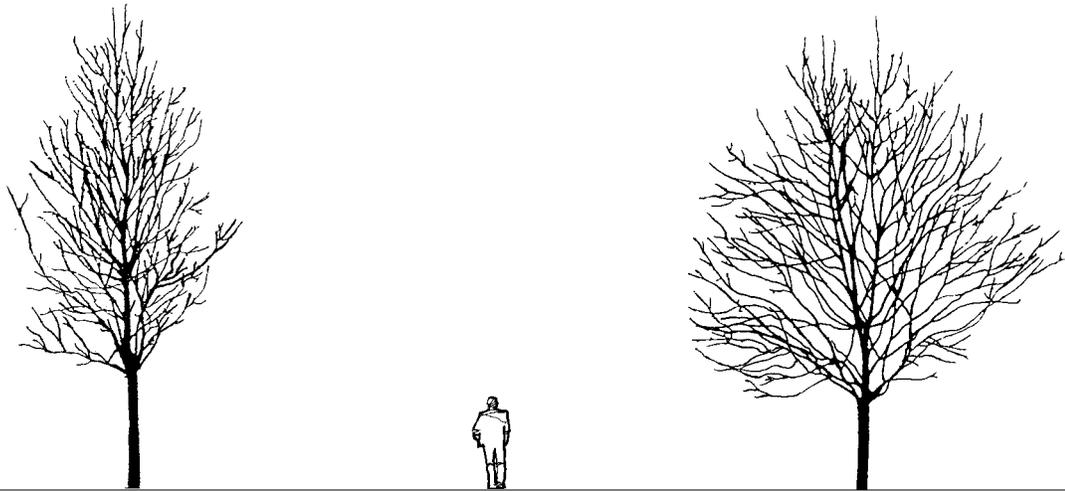
AMUR MAPLE
(*Acer ginnala*)

20-25 ft. spacing. Bushy tree requiring pruning to maintain neat appearance. Brilliant red fall color.



TATARIAN MAPLE
(*Acer Tataricum*)

25-30 ft. spacing. Upright form (specify tree form). Dense bright green foliage with brilliant autumn color.



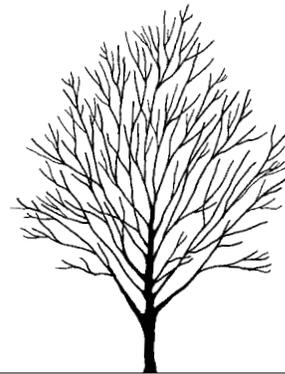
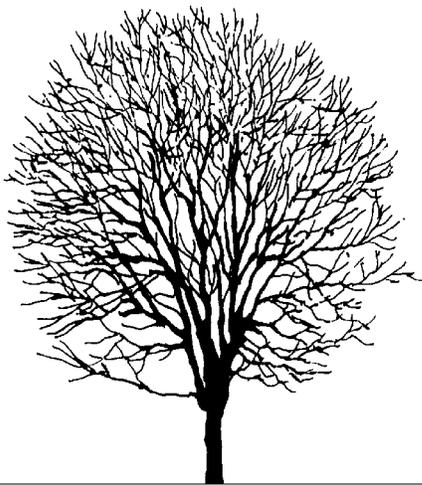
ARISTOCRAT PEAR
(*Pyrus calleryana* 'Aristocrat')

25-30 ft. spacing. Similar characteristics to Bradford Pear, with less formal, more open shape and good cold hardiness. Not appropriate for the street.

FLOWERING CRABAPPLES
(*Malus* sp.)

25-30 ft. spacing. Spring flowering deciduous ornamental tree with fall color. Select pest/disease resistant, varieties with minimal fruit litter. New varieties are being developed and monitored on a regular basis. Not appropriate for the street. Consult the City Forester.

Variety	Flower Color	Fruit
Spring Snow	white	none
David	white	1/2"
Radiant	pink	small
Profusion	red	yes
Indian Summer	red	3/4"

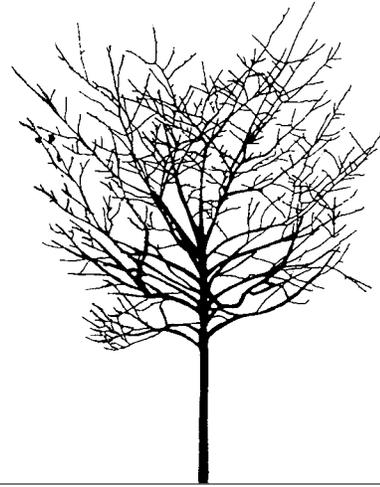
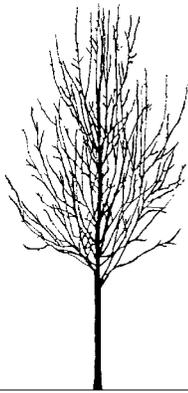


GOLDEN RAIN TREE
(*Koelreuteria paniculata*)

25-30 ft. spacing. Moderate growth rate. Dense round shaped tree. Yellow flowers in July; bright green leaves.

NEWPORT PLUM
(*Prunus cerasifera*)

25-30 ft. spacing. Open headed tree with early white flowers followed by purple leaves and edible plums.



REDSPIRE PEAR
(*Pyrus calleryana* 'Redspire')

20-25 ft. spacing. Similar characteristics to Bradford Pear except with tightly narrow shape and red fall color. Not appropriate for the street.

THORNLESS COCKSPUR HAWTHORNE
(*Crataegus crusgalli* 'inermis')

25-30 ft. spacing. Spring flowering deciduous ornamental tree with fall color. Glossy foliage. Red fruit in fall. Not appropriate for the street.



S.R. DeBoer's studio; large shrubs were used outside the right-of-way to separate the vehicular entrance from the front patio area.
Courtesy Denver Public Library, Western History Department.

II. Groundcovers

Groundcovers, provide seasonal color, direct circulation and serve as a buffer between people and cars. Ground cover plantings provide functional and aesthetic benefits, however maintenance is extremely important.

A. Design

G u i d e l i n e s

Plantings other than trees in the streetscape may include turf, ground covers or shrubs. In commercial streetscapes with a large area between the sidewalk and the street or low pedestrian volume, a tree lawn of grass may be most appropriate. This area helps soften the street environment along the street edge.



Brick Pavers may be used in place of very narrow tree lawns where irrigation is impractical or in areas that receive high volumes of foot traffic.

1. Tree lawns, especially in new developments, should be at least 8 feet wide to accommodate irriga-

tion systems and to provide adequate room for healthy tree root systems. Turf should be provided



Low growing shrubs or ground covers may be used when the tree lawn is too narrow for efficient irrigation.

where the average width of the tree lawn is 8 feet or more. Small lengths of step-out strips may occur within the 8 foot width. However, widths less than 4 feet should be avoided. To water efficiently care must be taken, whether done by hand or by irrigated system.

2. For tree lawn areas less than 8 feet wide, turf is difficult to irrigate efficiently and groundcovers or paving may be considered. Groundcovers are preferred for widths between 5 feet to 2 feet. Paving is preferred

where widths are less than 2 feet and in areas where heavy traffic and regular snow plowing occur.

3. For areas less than 30 square feet, special concern must be given to the maintenance available and groundcovers are the recommended material.

4. Tree lawns should be planted with sod or low groundcovers (below 6 inches mature height) in residential areas and in commercial areas where pedestrian traffic does not warrant paving.

5. Very narrow tree lawns or those in high traffic areas may be paved with brick, flagstone or concrete pavers and/or colored or scored concrete. However patterned (stamped) concrete is not allowed.

6. Tree lawns should not be elevated above curbs except to provide positive drainage. Where planters are used, the Transportation Division requires that they be elevated a minimum of 2 feet above top of curb, located so as not to interfere with vehicle sight lines and located 30" minimum from the curb face.

7. Where the tree lawn area is paved, a permeable paving system should be considered to enhance the survivability of street trees.

B. Recommended Groundcovers

These plants are recommended because they require moderate to low amounts of water and have proven to be successful in Denver. Others may work in special conditions but the City Forester should be consulted.

Specific site conditions must be fully understood prior to plant selection. Local microclimates and soils are key factors that determine which plants will thrive. Where possible, low water-requiring plants should be selected. Trees and shrubs will require less water and will thrive better if placed in planting beds rather than turf areas. Water-loving plants should be used in naturally moist areas and should be irrigated separately or provided run-off water to minimize irrigation needs.

The City and County of Denver is committed to the reduction of water consumption in landscape irrigation and encourages the application of Xeriscape design and maintenance principles.

Recommended Turfgrasses

Turf should be planted on prepared soil from seed or sod. Seeding allows a greater turf selection but requires approximately six months and regular maintenance to become established. Newly seeded areas require protection from pedestrians and must be kept moist until the seeds germinate. Sod creates an immediate effect but requires high amounts of water until established. All irrigated turf areas require organic soil amendments at the rate of at least 3 cubic yards per 1000 square feet.

Alternatives to bluegrass are recommended and should be utilized in all areas not prone to high pedestrian traffic. As alternative species are developed, water-conserving sod or seed should be used. For recommended varieties, contact the Colorado State University Extension Turfgrass Specialist.

MIXED FINE FESCUE, RYEGRASS, AND BLUEGRASS.

This mix works in sun and shade, suits a number of climate and soil conditions and provides improved shade, disease, salt and moisture stress tolerance over pure bluegrass. Most commonly planted as seed mixed to specific site conditions.

TALL FESCUE - TURF TYPE

Deep green color, shade and salt tolerant, and drought resistant because of its deep root system. Currently available as sod both with netting and without. Include at least three improved varieties of turf-type tall fescue in the blend.

KENTUCKY BLUEGRASS

Bluegrass varieties and blends are not generally recommended due to their high water needs. Bluegrass is appropriate only in areas which receive extensive foot traffic. Blends including three or more varieties improve disease resistance.



Tall fescue turf grass on display at the Denver Water Board's demonstration garden.

Recommended Groundcovers

Where ground covers are used, the intent should be to create a consistent carpet of plant material similar to the affect achieved by turf.

Mixed uses of species which create a planting display are not desirable except at planted corners on residential streets. Ground covers provide more seasonal variety, require less water and, once established, usually require lower maintenance than most turf species. For ground covers to be successful, they must create a tight, dense planting.

Groundcovers are not as dependable as turf when required to grow with poor soil preparation and maintenance and should only be planted in areas which will receive minimal foot traffic. They require adequate water and weeding until established.

The species listed are preferred for their dependability, low maintenance and drought resistance unless otherwise noted. Other species may be allowed by the City Forester; however, their use should be limited to small areas with special needs.



"Border Jewell" at Harrison Memorial Animal Hospital, 191 Yuma Street.

HIMALAYAN BORDER JEWEL
(*Polygonum "Border Jewell"*)

Deciduous ground cover. Full sun. Aggressive. Withstands only minimal foot traffic.



Periwinkle at the Denver Botanic Gardens.

PERIWINKLE
(*Vinca minor "Bowles"*)

Flowering evergreen ground cover. Prefers part shade, but tolerates sun or full shade. Plant 12 inches on center. Do not plant within 8 inches of curb. Withstands only minimal foot traffic.



Moneywort at a private residence.

MONEYWORT
(*Lysimachia nummularia*)

Deciduous ground cover, full to partial sun. Two inch height. Yellow flowers.



Prostrate Juniper at Cherry Creek North.

PROSTRATE JUNIPERS
(*low varieties of Juniperus chinensis, J. horizontalis, J. sabina*)

Evergreen ground cover. Choose lower growing varieties from among many available from plant suppliers. Full or part sun, excellent on slopes. Plant 4 feet to 5 feet on center. Drought tolerant when established. Plant no less than 2 feet back from curb. Will not tolerate foot traffic.



Woolly Thyme at the Denver Botanic Gardens

WOOLY THYME
(*Thymus pseudolanuginosus*)

Evergreen ground cover. Full sun. Fine grey textured foliage. Withstands minimal foot traffic.



Wintercreeper at the Denver Water Board demonstration garden.

WINTERCREEPER
(*Euonymus fortunei varieties*)

Semi-evergreen vine. Requires some shade; tolerates full shade. Plant 12 inches to 18 inches on center, slow growing.

C. Groundcovers Not Recommended

Annual flowers, flowering perennials and shrubs over 6 inches are not recommended except in planter pots. Mixed plantings which create a display are not recommended,

except in special circumstances.

D. Groundcovers Not Allowed

No gravel, tree bark, wood chips, loose stones or other non-organic materials may be used as a perma-

nent groundcover in tree lawns. Shrubs over 18 inches high are not allowed. Mulches are recommended initially under groundcovers and shrubs until plant material is established to control weeds and conserve moisture.

III. LIGHTING

Lighting can play an important role in the character, function and security of a streetscape. Scale, style, lighting effect, cost and maintenance affect fixture selection. Street lighting is owned and maintained by Public Service Company and is subject to their requirements as well as those of the City of Denver.

A. Pedestrian-Lighting

Pedestrian lighting consists of fixtures less than 14 feet high and is not provided by Public Service Company. It is generally not recommended in front of residences except at bus stops or where a comprehensive neighborhood or district plan calls for it. Various programs in the city may provide pedestrian lighting through a grant to a neighborhood association. Call the Office of Planning and Community Development for more information.

Pedestrian-scaled light posts and luminaires play a vital role in developing the unique character of commercial districts throughout the city. Pedestrian lights illuminate the sidewalk and provide a feeling of security at night. Fixtures should relate to the image and history of the individual area and to fixtures in similar districts in the city.

Spacing and Location

Locate lights as part of an overall system that organizes other street elements such as trees, benches, and paving.

1. Place lights at least 2 1/2 feet from the back of the curb to allow room for car bumpers and door swings. Align with street trees where possible.
2. Place lights at least 5 feet from



Turn of the century street lighting on 14th street, designed by Henry Read, chairman of the Art Commission, ca. 1910.

Courtesy Denver Public Library, Western History Department, L.C. McClure (detail).

the edge of the curb transition point nearest the driveway, curb cut or alley and at least 20 feet from the extended flow line of the nearest intersection.

(See diagram, page 43)

3. Space lights at least 50 feet apart. 60-115 feet is preferable in most cases to provide a pleasing effect and to ensure room for street trees and other furnishings. Closer spacing can also cause uncomfortable glare.
4. Install luminaires a maximum of 14 feet and a minimum of 12 feet above sidewalks to avoid glare into upper windows. Avoid placing lights directly in front of residences to avoid disturbing inhabitants.

Style and Materials

Select lighting styles to integrate with the architectural or historical character of the area.

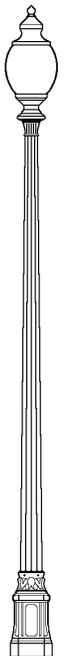
1. Acorn type luminaires are recommended for most commercial streets in order to maintain consistency throughout the city. Avoid selecting different types of lighting for small projects.
2. Globe type luminaires are reserved for parks and parkways exclusively.
3. Poles should be well articulated with enough detail to create a range of scale for the pedestrian whether near or far away. Flutes, mouldings or other traditional details are strongly preferred.
4. Alternative fixtures that reflect local architectural or historical character are subject to approval by the Planning and Community Development Office and the Transportation Division.
5. Single luminaires are highly preferred over multiples, which should be considered only for special locations such as gateways or entry points of a district.
6. Pole and base colors are to be either black or 'federal green' (federal color specification #14056).
7. Luminaires are to be translucent or glare-free, utilizing obscure glass or acrylic lenses.
8. Luminaires used in single or multiple pedestrian light fixtures are to use 50 watt high-pressure sodium lamps to provide consistent light color and intensity levels citywide. An 18 watt compact fluorescent lamp is an option where a whiter light color is architecturally desirable.
9. Multiple luminaires should not be more than 50 watts in each luminaire.



Whether made of aluminum or cast iron, pedestrian scaled light poles must be sturdy enough to withstand potential vandalism and maintain their original design intent over the life of the project without excessive maintenance.

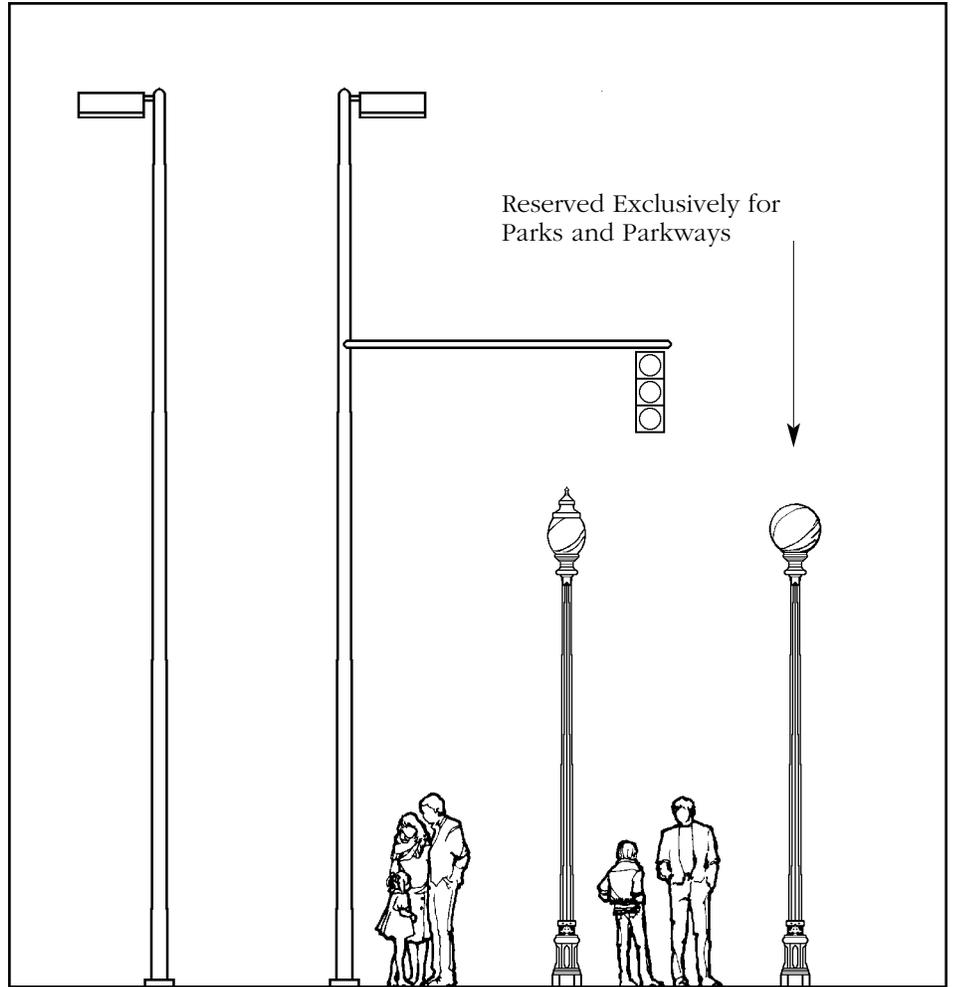
B. Street Lighting

Streetlighting plays an important role in the quality and safety of streets, especially at night. Lighting illumination levels are based on two criteria: the uses along the street (such as commercial or residential) and the volume of automobile traffic. The City of Denver and Public Service Company have guidelines for spacing, location, style and color. Once a site plan has been developed including street trees, pedestrian lighting and furnishings, the plan should be submitted first to the City of Denver and then to PSCo for street lighting input. PSCo review should include transformer, cabinet and meter locations. For questions regarding specific design issues such as pole spacing and wattage contact the city's streetlighting design engineer. For questions regarding permits, fees and billing, contact the city's streetlighting administrative engineer (see Agency Summary).



Lower Downtown (LoDo) pedestrian light

ing, location, style and color. Once a site plan has been developed including street trees, pedestrian lighting and furnishings, the plan should be submitted first to the City of Denver and then to PSCo for street lighting input. PSCo review should include transformer, cabinet and meter locations. For questions regarding specific design issues such as pole spacing and wattage contact the city's streetlighting design engineer. For questions regarding permits, fees and billing, contact the city's streetlighting administrative engineer (see Agency Summary).



Citywide standards for street and pedestrian lights.

Spacing and Location

Locate street lights as part of an overall system including cabinets, transformers etc.

1. Place lights at least 2 1/2 feet from the face of the curb to allow room for car bumpers and door swings.
2. Place lights at least 5 feet from the edge of the curb transition point nearest the driveway, curb cut or alley. At signalized intersections, lights are generally mounted on the signal poles. Where signals don't occur, locate lights near the intersection.
3. Spacing for commercial streets will range from 100 to 150 feet. For residential streets 150 to 170

feet is appropriate and for special districts such as downtown consult the City of Denver street lighting design engineer (see Agency Summary).

C. Special Effect Lighting

Special effect lighting may include string lighting in trees or uplighting in the tree grate or planting bed. If string lighting is desired, electrical outlets should be included adjacent to each street tree.

If uplighting is desired around trees, tree grates should be used with cut-outs for the light. Uplighting should be selected to blend with plantings, be waterproof and directional. Up lighting should use fixtures which shield the light source from passing motorists.



Detached sidewalks in the Curtis Park Historic District. ca. 1990

IV. Paving

Paving is an important unifying element in streetscape design. Paving patterns can guide movement, define spaces and provide variety. When designing a pedestrian area paving patterns, colors and textures should be complementary to surrounding elements. Well-designed paving creates order, scale and identity on the street. Once established, the paving pattern should become the organizing framework for furnishings, trees and plantings.

A. Sidewalks

Sidewalks give pedestrians access along streets. Sidewalks in Denver neighborhoods have traditionally been detached from the curb. This provides the tree lawn and room for street trees close to the curb. The detached sidewalk is strongly preferred in all Denver neighborhoods because it enhances the beauty, safety and shared common space in the neighborhood.

Concrete is the preferred material, although interlocking concrete unit

paving, flagstone and brick paving may be acceptable in neighborhoods where these materials are prevalent. Special paving in tree lawns is recommended in residential streets only where pedestrian use is heavy and tree lawns cannot support turf or ground covers.



Detached from the curb, this sidewalk is made of concrete with a heavy broom finish and strong trowelled joint pattern.

Sidewalk Guidelines

Paving is the best way to unify the street. Over-designed patterns may become chaotic or dated. Pattern and color should be subdued and avoid sharp contrasts with surrounding paving. Pattern should relate to the size and shape of the space and should create a sense of order in the placement of other street furnishings and plant materials.

1. Maintain a clear unobstructed pedestrian path. In downtown Denver, 10 feet width is required. In other areas 10 feet width is desired but as little as 5 feet may be allowed in constrained locations. A 5 foot width is the minimum for residential areas.

2. Detached sidewalks should include a tree lawn of 8 feet minimum, planted with trees and groundcover or sod. Where groundcover or sod is not practical, as in retail streets, tree grates surrounded by a hard surface of pavers or concrete are appropriate.

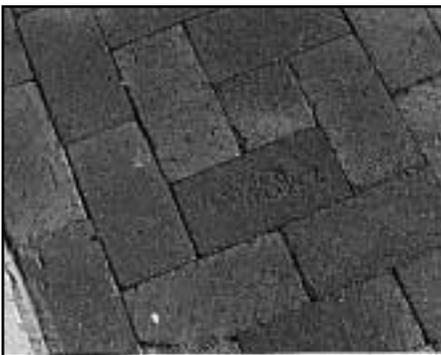


The splash strip on 6th Avenue at Josephine Street helps protect the tree lawn.

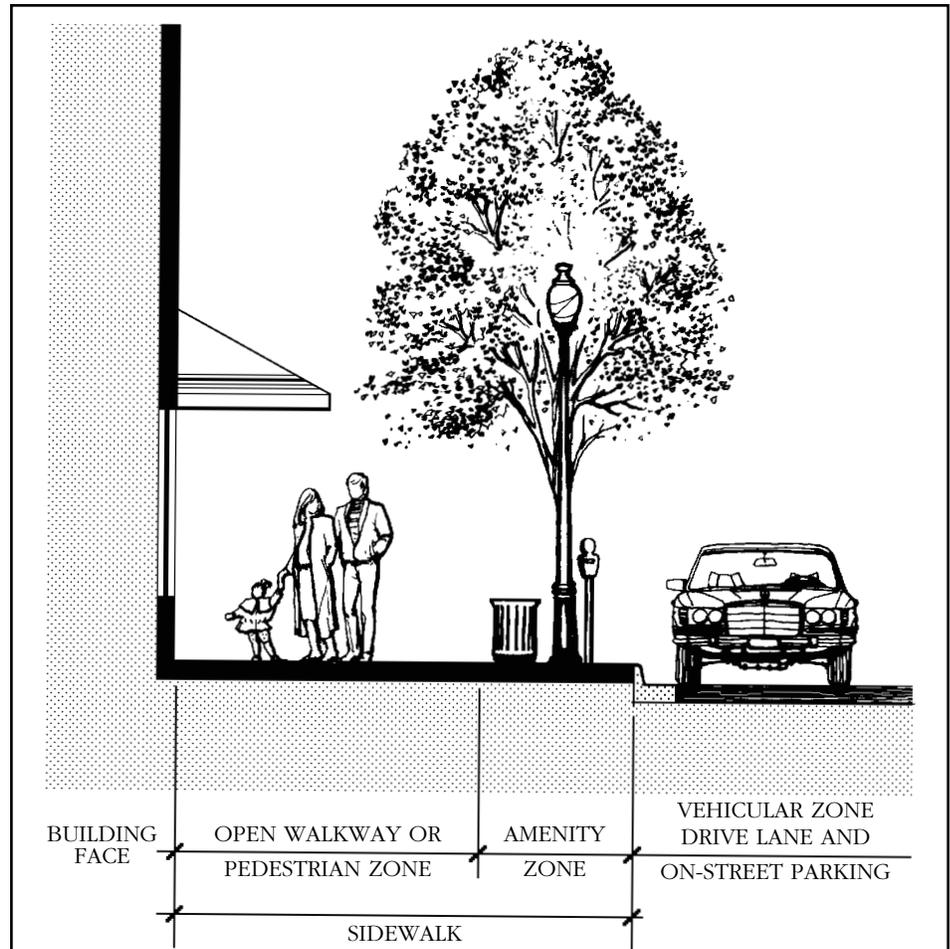
Sidewalk Pavements

1. Concrete including plain grey, integral colored concrete and special finishes is acceptable (excluding stamped concrete, seeded concrete or epoxy concrete). Concrete should be a minimum of 4 inches thick, meeting industry standards for concrete mix, finishing, curing and sealing.

2. Care should be taken when using integral pigmented colored concrete. Select subdued and earthtone colors which will complement natural materials. A good example is "Sunset Rose" (1 lb of No. 160 per bag of cement), manu-



Brick pavers add an interesting detail at 4000 Tennyson Street.



Section drawing through typical commercial sidewalk.

factured by the Frank D. Davis Company. Rich or bright colors will draw more attention than desired.

3. Use only paving bricks specifically designed for sidewalk use according to industry standards. Brick pavers must be set on a concrete slab with mortar joints and not on a sand base.

4. Interlocking concrete pavers, are a durable choice. Set on a sand base with tight sand joints according to manufacturers recommendations.

5. Flagstone pavers are recommended in historic areas where they originally existed. Installation may be on a sand base with sand joints or on a concrete base with mortar joints as approved by the Department of Public Works.

6. Precast concrete pavers may be installed using finish and color guidelines as discussed under concrete pavement above. These pavers may be installed on a sand base or on a concrete slab with mortar joints.

7. Once installed, all pedestrian walks must be safe for pedestrians with no gaps or joints larger than 1/4 inch.

B. Amenity Zone

The amenity zone is a paved area along the back of the curb in a commercial streetscape that organizes trees, plantings, furnishings and lighting. It may range from 4 to 12 feet wide. Ample clear space must be provided between the amenity zone and building facades on the sidewalk for pedestrian circulation.



Trees, lights, and furnishings are located in the Amenity Zone which separates pedestrian and store front uses from vehicles.

G u i d e l i n e s

1. Maintain an 8 to 10 foot wide pedestrian zone or unobstructed open walkway.

2. The amenity zone may be as narrow as 4 feet without trees or 5 feet with trees, however wider dimensions are strongly recommended.

3. The amenity zone may be narrowed or relocated to accommodate outdoor uses associated with individual businesses such as sidewalk cafes.

C. Curb Ramp and Curb Cut Guidelines

The construction and reconstruction of all sidewalks in the city



Trough type curb cut ramp. The curb "returns" up the ramp which provides orientation for the visually impaired.

should include curb ramps at all intersection corners to enable the safe and convenient movement of all pedestrians. Curb ramps should align with curb ramp locations across the street. Ramps located at the 45 degree point of the curve are the least desirable because of the potential danger to pedestrians and bicyclists.

Curb ramps are required anywhere the sidewalk crosses a curb. In downtown a "walk-over" type of curb is standard. Trough-type ramps are recommended elsewhere in the city. Any deviation from the city standards must be approved by the Department of Public Works prior to construction. See Denver Street Development Standards and consult with Transportation Design Engineering.

D. Crosswalk Pavements

Crosswalks are generally painted at signalized intersections in most areas of the city. In commercial areas the crosswalk materials and pattern can be an important unifying feature of the district.

G u i d e l i n e s

Within a district it is important to treat each street intersection the same in terms of size of curb radius, location and type of curb ramps, signage location and paving within crosswalks. Crosswalk pavement should contrast with the adjacent street pavement through color or texture. Drivers need to know where to stop or look for pedestrians and pedestrians need to know where they can rely on crossing the street safely.

Even if the crosswalk is distinguished in terms of color and texture, it is still necessary to install "stop bars" using paint or vinyl street marking material as determined by the Transportation Division.

Recommended Crosswalk Paving

Contact the Transportation Division for additional information on crosswalk paving and striping.

1. Painted lines on the street are the most inexpensive solution and are the most visible marking.
2. Concrete paving can be used as a contrasting material in asphalt streets but it must be augmented by painted or vinyl stop bars. Stamped concrete is prohibited.
3. Unit pavers and brick pavers can be used with cautions. They are expensive, the contrast between paver and asphalt may not be sufficient and painted stop bars are a necessary minimum.

E. Entry Walks

Entry walks are those walks which extend out from the home and/or detached sidewalk and lead to the curb. They are appropriate in the tree lawn where there is a functional need for them. Two or 3 feet are recommended widths, with a maximum of 5 feet allowed. They may be used in conjunction with step-out strips as a way of giving access from parked/stopped

vehicles to the sidewalk. Concrete is the preferred material, although interlocking concrete unit paving, flagstone and brick paving are acceptable in neighborhoods where these materials are prevalent.

F. Step-Out Strips

“Step-out-strips,” or landing walks, are recommended as a way to facilitate access to cars while maintaining the integrity of the tree lawn. Step out strips are a 12-24 inch wide area of paving next to the curb, connected to the sidewalk by an entry walk. Historically, step out strips were short in length and had to serve only one carriage or car. Today it may make sense to install a longer version perhaps running the entire length of curb in front of a property.

The design intent for step-out-strips should be to minimize the disruption within the continuous tree lawn. Where possible they should be designed to be inconspicuous. Plain concrete paving, brick paving, interlocking concrete unit paving, and flagstone are acceptable materials. Installing a step-out strip requires a construction permit from the Solid Waste Management Section, Neighborhood Support Services.



A properly designed step-out strip will maintain the integrity of the tree lawn while providing access to cars parked on the street.

G. Splash Strips

Splash strips are typically a 12 to 18 inches wide paving along the back of the curb. They protect the median or tree lawn landscaping from sand and salt used on the roadway. They are most appropriate where streets have no parking lane and heavy auto traffic occurs adjacent to the curb. They should be installed in continuous sections for a uniform appearance and performance. (See page 32)

H. Paving Not Recommended

1. Stamped concrete is not permitted on sidewalks or elsewhere in public rights-of-way because of appearance, difficulty of snow removal, poor durability and future repair difficulties. Patterned paving in tree lawns is not recommended because it visually calls attention to an area that should not be a focus.
2. Seeded concrete and epoxy concrete are not acceptable because of appearance, poor durability and future maintenance problems.
3. Any glazed product or smooth, slippery surface product should not be used in pedestrian traffic areas for pedestrian safety.
4. Any thinset material should not be used because of future maintenance problems.
5. Any clay brick product other than paving brick should not be used because it may be difficult to maintain and the product's resistance to freeze-thaw damage may not be adequate.
6. Any material that is so textured or patterned that it may cause a tripping hazard, should not be used



Sturdy iron benches have contributed to the historic Denver streetscape at trolley stops and as shown here at Civic Center Park.
Courtesy Denver Public Library, Western History Department, L.C. McClure (detail).

V. FURNISHINGS

Street furnishings such as seating, newspaper racks, bicycle racks, bollards and trash receptacles are important functional elements and amenities, especially in the commercial streetscape. They should be designed to be attractive and unified within any given district.

Maintenance, safety and comfort are primary considerations in the design and placement of street furnishings. All furnishings placed in the right-of-way should be of high quality, designed for outdoor use and require minimum maintenance.

In general, street furnishings should be located at least 2 1/2 feet from the curb face where on-

street parking occurs, and 3 1/2 feet where travel lanes adjoin the curb.

Street furnishings require a revocable permit issued through the Department of Public Works, Right-of-way Engineers



Neighborhood entry monuments can provide a sense of identity for residents and further enhance the pedestrian quality of the neighborhood.

A. Neighborhood Entry Monuments

Distinct, identifiable neighborhoods may desire to have monuments placed at key points of entry or at the center of the neighborhood. Entry monuments can be a source of pride for residents and give identity to the neighborhood.

G u i d e l i n e s

Entry monuments should only occur where a distinguishable entry along a street already occurs. In some neighborhoods clear points of entry are difficult to find yet identity monuments at key locations may be appropriate to help create a sense of place and to reinforce the neighborhood identity. Monuments should reinforce the character appropriate to the neighborhood

1. Entry monuments should be integrated into a total design of typical elements such as trees, ornamental lighting, paving patterns, median planting, walks and buildings.

2. The scale, character, shape, materials and location of entry monuments must be planned and consistent for an entire neighborhood. This does not mean that all entries should have monuments. If too many are placed or if they occur in inappropriate locations, the strength of the entry will be diminished. Ad-hoc placement and design of entry monuments is not acceptable. Contact the Office of Planning and Community Development for more information.

3. Provisions must be made for the maintenance of entry monuments. The most effective way to address their maintenance is to have a neighborhood association committed to their upkeep. If this is not feasible, it may be possible to have them added to a list of similar miscellaneous improvements that are the responsibility of the Department of Public Works. Their design should be as durable and maintenance-free as possible. All monuments must be approved by the Department of Public Works prior to construction.

4. Appropriate scale and proportion are critical to the sense of arrival and entry. Monuments must be effective at the pedestrian and vehicular scale. A range of scales will also create a sense of movement at the point of entry. Monuments must be located a certain distance away from a street intersection. Contact the Traffic Engineering Division for more information.

5. Monument design should embody elements of form and detail which represent and identify the neighborhood. The monument should make a reference to the character of the shared vision of the district which it serves.

6. All entry monuments should fit comfortably into the family of existing gateway monuments in Denver.



District Gateway Markers define the edge of the Lower Downtown Historic District.

B. Commercial District Gateway Markers

Gateway markers may be used to define a commercial district. They are recommended only where a coordinated district plan includes markers as an important element to be unified with the overall district design.

G u i d e l i n e s

The site and surrounding elements of markers are important. Lighting, planting and signs related to the markers should be carefully designed to reinforce the gateway. The design of the markers should be coordinated with the materials and details of other elements in the district and should embody the characteristics that identify the area.

1. Scale and proportion are critical to the design of the gateway. The scale of the markers should relate to street width and the size of buildings nearby and must be effective at the pedestrian and vehicular scale, meaning they must be attractive and interesting from the street and the sidewalk.

2. Entry markers must not interfere with driver sight-lines at corners. Contact the Transportation Division for detailed requirements.

3. Some districts may have a primary gateway and secondary points of entry. A hierarchy of gateways should be developed if secondary entries are to receive markers.



Walls can be used to accommodate changes in grade.

C. Walls and Screens

Walls and screens may be included in a streetscape to direct or screen a view or to provide changes of grade. The height and material selected should relate to building architecture and the character of the district. Walls and screens can be important in creating a continuous sidewalk edge that unifies the street space.

Call the Zoning Administration and the Office of Planning and Community Development for information regarding parking lot screens.



A durable steel screen is located so that it continues the line formed by the face of the building which defines the pedestrian walkway.



Made of durable, heavy gauge steel the "Bowery" style bench is recommended for most streetscape projects.

D. Seating

Seating may be provided when space allows for a clear pedestrian walking zone and separate seating areas. Seating expands opportunities for people to use the street, especially in commercial streetscapes. Seating may be provided by benches, planter walls, edges, steps, or moveable chairs.

G u i d e l i n e s

1. Seating surfaces should be 16 to 18 inches high and should have a minimum depth of 16 inches for seats without backs, 14 inches for seats with backs.

2. Walls, ledges and steps that are available for seating should be between 12 and 20 inches high and 16 inches wide wherever possible. Walls used for seating on both sides should be a minimum of 30 inches wide.

3. Seating should be durable and

comfortable. Avoid sharp edges and poorly designed or fabricated furniture. Metal is the preferred material.

4. Seating design should complement the style of the surrounding architecture and other furnishings.

5. Except for moveable chairs, seating should be secured permanently to paved surfaces for safety and to avoid vandalism.

6. Seating should not interfere with plant materials or pedestrian circulation and should be placed for psychological comfort.

7. Comfortable seating should provide a sense of having protection from behind and something interesting to look at such as shop-fronts or other pedestrians.

8. Seating adjacent to where bicycling is permitted on sidewalks or other bike paths must have a minimum 3 foot clearance from the bicycle path.



Cast iron tree grate at Bannock Street and Fourteenth Avenue.



Ornamental fencing in Congress Park neighborhood.



Parking lot screens in Lower Downtown help unify the streetscape.

E. Tree Grates

Tree grates are an attractive way to protect trees planted in paved areas. Other options such as modular blocks, brick pavers, flagstone (in historic areas) and ground covers may be used upon approval of the Transportation Division and the City Forester.

G u i d e l i n e s

Tree grates are the recommended method for tree planting in paved areas.

1. Open tree grates should be at least 5 feet by 5 feet with openings no more than 1/4 inch in width.

The size and shape of tree grates should relate to the paving pattern. They should be designed to allow for tree trunk growth, constructed of ductile iron, and unpainted or painted a dark color with a durable, factory applied finish.

2. Irrigation systems within grates are preferred but dry wells may be allowed with written maintenance agreements from the owners. The irrigation system should be on a zone separate from all other landscape zones and should be reviewed with the City Forester.

3. If string lights are anticipated in the trees, electrical outlets should be provided in the tree grate area. If uplighting is desired, select a tree grate manufactured to support the light.

F. Fencing and Railings

Fencing within a commercial streetscape can be provided to enhance a neighborhood characteristic while in residential districts it helps create a definition of the front yard. Railings may be necessary as a safety feature or as a functional support rail (leaning rail) for people to lean against. Railings and fences can help define the street space.

G u i d e l i n e s

Fences and railings should have an ornamental character as well as utilitarian function. Where railings or fences in a particular neighborhood or district contribute to the overall image of the area, try to use the same or similar design details to reinforce that character.

1. Fences and railings must not interfere with pedestrian safety by blocking access from the street to the sidewalk.

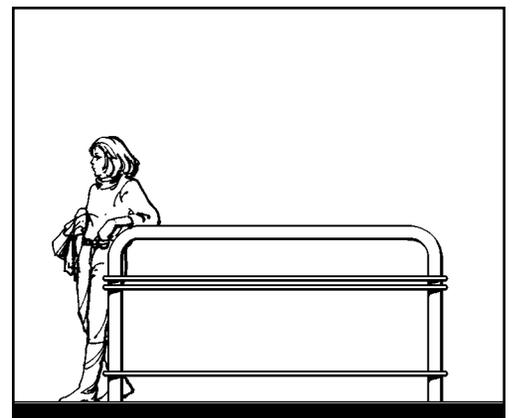
2. In certain situations a railing is required to protect the public against potentially hazardous grade changes. Pedestrian safety railings at grade changes shall be a minimum of 42 inches high. They must have intermediate rails, balusters, ornamental or patterned infill. For more information contact Design or Transportation Engineering, Department of Public Works.

3. Fences and railings should be between 32 inches and 48 inches tall except railings on bike ramps which must be 54 inches tall to meet AASHTO standards.

4. Where desired, place leaning rails at or near bus stops, places where shoppers are picked up or dropped off, and places where people are likely to stop or wait without necessarily wanting to sit. Leaning rails should be between 27 and 42 inches in height.

5. A 2 to 3 inch high curb placed 4 inches in front of a railing will prevent the footrest of wheelchairs or other wheeled vehicles from striking the railing's vertical supports.

6. Railings must be designed to support loads in both the horizontal and vertical directions of 50 pounds per linear foot. Fasten railings securely.



Leaning Rail fabricated from steel pipe or other durable materials.



The Trash Receptacle typically found in Lower Downtown.

G. Trash Receptacles

Trash receptacles should be easily accessible for pedestrians and trash collection. Their design should relate to other site furnishings as well as building architecture. They must be carefully placed to be unobtrusive yet effective. On paths where bicycling is permitted, maintain a 3 foot setback from the edge of bike path.

G u i d e l i n e s

Trash receptacles should be designed to fit anticipated use and frequency of maintenance. They should be firmly attached to paving to avoid vandalism. Covered tops and sealed bottoms should be included to keep the contents dry and out of sight at all times.

Trash receptacles should be designed in two pieces. The inner container should ensure easy trash pickup and removal and an outer shell should blend aesthetically with the other streetscape elements. They should be conveniently placed near benches, bus stops and other activity nodes, and arranged with other streetscape elements into functional compositions. They should not be placed directly adjacent to benches.



A Bollard design that fits in well with the character of the district.

H. Bollards

Bollards are generally used to create a low barrier that separates auto and pedestrian traffic, highlight and protect a special feature, emphasize the historical character of the area or direct circulation patterns.

G u i d e l i n e s

Select a bollard design that is architecturally and aesthetically appropriate to the area and other streetscape elements. Bollards can be used to provide low-level lighting to pedestrian paths.

1. Bollards should be between 28 and 42 inches high.
2. Bollards should be set 2 1/2 feet minimum clearance from curb face.
3. Clearance between bollards or between bollard and any other structure or pole must be at least 36 inches. Clearance must be at least 60 inches where there is clearly one primary path.
4. Bollards may be chained or cabled together if provided with attachments as an integral part of the design.
5. Standard pipe filled with concrete is not acceptable in pedestrian locations.
6. Utilize removable bollards where service vehicles need periodic access.



Planting Pots add color to the street and can be located to direct pedestrian traffic.

I. Planting Pots and Planters

Planting pots provide an added dimension and color to streetscape planting. They also direct pedestrian traffic, create focal points and provide pedestrian resting areas. Large pots are preferred instead of fixed planter boxes because of potential conflicts with vehicles and maintenance.

G u i d e l i n e s

1. Planting pots should be planted with annual flowers or with ground covers. Pots should occupy a surface area of at least four square feet and should not block other elements such as streets, signs, meters, or street lights,
2. If planter boxes are used, trees or any woody shrubs should not be planted in them. Their survival rate is generally very low because the roots often freeze in the winter. Only annual flowers or ground covers should be planted in boxes.

Planters that are to be used for seating should be between 12 and 20 inches in height with a rim of at least 8 inches in width, wider if seating is intended on the edge. Plant materials should not interfere with the seating. Provisions must be made for ensuring adequate watering and drainage. Staining of paving from planter drains should be considered in planter location.



These racks are painted a neutral color and “ganged” together for an orderly appearance.

J. Newspaper Racks

Appropriately designed newspaper racks should serve the public without compromising pedestrian circulation and the appearance of the street.

G u i d e l i n e s

1. Cluster newspaper racks together wherever possible. Screening should also be considered to minimize views of the racks from the street. Arrange racks with other elements to create an organized streetscape.
2. Racks should be painted a neutral background color so that they do not stand out.
3. Racks should be placed at least 2 1/2 feet from the curb face making sure that there is adequate width on the sidewalk between racks and adjacent buildings. If possible, place racks against the building wall and leave the rest of the sidewalk clear for pedestrians.
4. Racks should be placed as close as possible to pedestrian activity nodes. They shall not be located where they will obstruct the view of drivers at intersections or block views of business displays or signs.



Bicycle racks like this one are attractive and easy to use while allowing both the frame and at least one wheel to be locked.

K. Bicycle Racks

Bicycle racks should be provided within commercial streetscapes to encourage bicycle use.

G u i d e l i n e s

1. Avoid placing bicycle racks in areas where they may endanger the safety of pedestrians or cyclists.
2. Select racks that are permanently mounted structures, designed in a simple style, and easy to use. The rack must allow both the frame and at least one wheel to be locked. Racks that allow for the locking of only one wheel are not acceptable.
3. Place bicycle racks where they are near entrances or gathering places. Avoid placement that creates a tripping hazard. If possible, place the racks where the parked bicycles will be visible from inside the adjacent building. Ideally, bicycle parking should be more convenient than automobile parking



Informational Kiosks should complement the surrounding architecture and other furnishings.

L. Kiosks

Kiosks are intended to serve as informational points, to direct pedestrian traffic and to organize outdoor spaces. They should be used sparingly and only when needed to impart community information.

G u i d e l i n e s

- Kiosks should be carefully positioned in conjunction with other elements of street furniture such as benches, lighting, and landscaping. They should be focal points in open areas, and may be combined with other elements like business directories, telephones, mailboxes and newspaper racks. The design should be compatible with and complementary to the surrounding architecture and other furnishings.
1. Kiosks should facilitate the posting of notices and their removal and cleaning.
 2. Kiosks should be easily accessible from all sides and adequately illuminated.
 3. Kiosk designs require review by the Denver Planning and Community Development Office.
 4. Kiosks should be designed so they are easy to maintain.



This fountain is a focal point for the seating area, the splashing sounds mask nearby street noises.

M. Fountains

A fountain provides moving water that masks noise, cools and humidifies the air, increasing comfort and beauty in a space. Fountains can also be used to define space or provide an interesting focal point.

G u i d e l i n e s

1. The rim around the fountain or pool should be between 12 and 20 inches in height and 16 inches in width if used for seating.
2. Fountain design should respond to wind direction, building location, pedestrian circulation, potential ice build-up in winter and the appearance of the fountain and its basin when not operating.
3. Fountains should include a recirculating pump for conservation purposes.
4. Maintenance is crucial to the success of all fountains. The owner should be committed to maintenance prior to beginning design.

N. Mailboxes

Mailboxes are placed by the U.S. Postal Service. Their location should be coordinated with the Postal Service during design to minimize clutter.

O. Parking Meters

The location of parking stalls and meters should be coordinated to minimize clutter. Meters should be aligned with other furnishings where possible. Alternate paint color and base covers for meter poles can improve the appearance of standard meters. They should be located 18 inches behind the curb, 22 feet on center, one per stall. Contact the Parking Management Division for more information.

P. Utility Boxes, Meters and Manholes

Coordinate the location of all proposed utility boxes and meters, including irrigation controls, with the proposed locations of site furnishings, trees, signs and lighting. Boxes and meters should be located 2 1/2 feet from the curb face and should not interfere with pedestrian movement

There are several kinds of utility cabinets that may need to be accommodated, including cabinets for electric meters, water meters, water/irrigation controllers, back-flow preventers, traffic signal switching equipment, and Public Service Company switching gear and transformers.

G u i d e l i n e s

1. Utilities should not be located under walkways or where they might interfere with or preclude street trees.
2. Traffic signal switching gear cabinets are of a standard design. They must be located near the signals they control, with care not to block pedestrian access at the street corner.
3. Electric meters, water meters and irrigation controllers can be handled individually or consolidated into one cabinet. Public Service Company transformer vaults and

switch cabinets are larger and should be located as inconspicuously as possible.

4. Any cabinet must be accessible, with room to swing the doors open and space to get the necessary equipment in position for service. Check with the appropriate utility for specific access requirements.

5. Before finalizing the design of any streetscape improvements, existing overhead and underground utilities should be located and sized with the assistance of the various city departments. Contact the following for more information: Public Service Company, U.S. West, cable television companies, Water Department, and Department of Public Works Solid Waste and Wastewater Management Divisions.

Q. Bus Stops

Standard bus shelters are placed by the Regional Transportation District (RTD) at stops where there is a clear need. If a different type of shelter is desired it must be approved by RTD. Any additional costs and maintenance become the responsibility of the adjacent property owner, maintenance district or business improvement district.

Benches are not placed by RTD except as part of a shelter. Advertising benches are placed by private companies under a revocable permit. If a different type of bench is desired or if a bench is desired where RTD does not find a need, then the adjacent owner must accept costs and maintenance and apply for a revocable permit. Neither the city nor RTD normally makes funds available to purchase or install benches. Call the Planning and Community Development Office or RTD for more information.



The Union Spire by artist Kevin Oehler at Wazee and Cherry Creek reflects a century of railroad heritage.

R. Public Art

Public art should capture and reinforce the unique character of a place. It can interpret the community by revealing its culture, history or fantasy. Art that invites participation and interaction, and that adds local meaning is preferred.

The Mayor's Office on Art, Culture and Film is responsible for administering the city's Art in Public Places program with the intent that 1% of the construction budgets of projects with budgets over \$1 million be utilized for the inclusion of art into those projects. The Commission holds selection processes for artists and artworks for each project.

Guidelines

Art should add beauty and interest. It may feature humor, water, seating, and opportunities for children to play. The setting for public art is significant to the experience of the art itself. The place's impact on the art may be as great as the art's impact on the place. The two together enrich the place and make it memorable.

1. When considering placement of freestanding pieces of art or sculpture, avoid locations where it would compete with a storefront or obstruct a pedestrian path, create a traffic hazard, or compete with another sculpture.
2. Murals or bas-relief may be used to enliven otherwise blank walls.
3. Construct public art using durable materials and finishes such as stone or metal.

VI. STREETSCAPE LAYOUT

There are many factors to consider in laying out a streetscape. Existing elements such as curb cuts, trees, storefronts and signage significantly influence the final layout. The examples shown are selected prototypical layouts that indicate common appropriate solutions to streetscape layout. Other layouts may fit a particular location more closely than these, however these should be used as a beginning point in design. For example, where uniform streetlighting is critical, such as on a commercial or arterial street, the uniform spacing of lights may be the determining factor for where all the elements are placed. The best layout should be a balance of existing constraints and the uniform placement of new elements. The examples illustrate the layouts for a typical east-west street with lots 125 feet deep interrupted by a 16 foot wide alley, and a north south street with a 500 foot frontage.



Consistent setback and building massing define the edge of the public space. Street trees had recently been planted when this photo was taken at 1400 Logan Street, ca. 1900. *Courtesy Colorado Historical Society, W.H. Jackson (detail)*

VII. RESIDENTIAL BUILDINGS

Residential buildings provide the edge of the perceived public space and are therefore important to the character of

a neighborhood. Buildings which follow a consistent setback and which provide a consistent mass and height along the edge of the street provide the most pleasing, unifying and traditional scale to a neighborhood. When combined

with well maintained front yards, tree lawns and street trees, individual homes and buildings form the backdrop of the street and contribute greatly to the neighborhood character which is so highly valued in Denver.



Commercial Building facade on Larimer Street, 1882. *Courtesy Colorado Historical Society.*

VIII. COMMERCIAL BUILDINGS

The building facade is an integral part of the streetscape. In commercial districts they should be well-designed, legible storefront designs that are complementary to the entire area.

A. Character

Use architectural features wherever possible to tie commercial buildings into a cohesive district. When possible relate entries, window lines and sign bands to adjacent buildings.

Use materials that complement the area's character in terms of color, scale, and texture. Use patterns



First floor shop windows, awnings, decorative lighting and tree canopies create a sense of pedestrian scale along South Broadway.

that provide scale and interest and relate to existing patterns in the neighborhood.

At the edges of neighborhood commercial districts, relate to the adjoining residential neighborhood with scale, detail and materials.

Avoid the use of reflective wall materials and glass that will generate glare and heat, especially at the sidewalk level and near residences. Transparent facades encourage shopping and increase the pedestrian's sense of security on the street.

B. Scale

Building scale contributes to our perception of a place's character. Create buildings that are pedestrian in scale, that impart comfort and contain visual clues as to the size of the building from close and distant viewpoints.

Design buildings to be small-scale, and pedestrian-oriented at the street level. Use structural bays, expressed columns, window mullions, etc. to give the ground floor level "human" scale. Design large buildings so that they appear small in scale when seen from the sidewalk. Avoid massive, monolithic facades.



Outdoor dining areas create visual interest within the pedestrian walkway.

C. Continuity, Interest, and Comfort

If streets are to have activity, buildings must be oriented to the street. Facades should provide a continuity of retail frontage along the sidewalk. When planning new buildings develop the ground level with as much street-oriented retail or services as possible.

Develop the ground level of buildings to provide visual interest to pedestrians. Outdoor dining areas, retail display windows or activities that are visible from the street accomplish this. Create lively and interesting facades for the enjoyment of pedestrians.

Retail shops at street level should have direct access to and from the sidewalk. Avoid designs that require entry from internal malls or lobbies, except for shops at the upper level.

Avoid split-level entrance schemes, as they reduce pedestrian activity on the street and create barriers between shoppers and display windows.

Building facades should closely align and create a continuous facade, punctuated by store entrances and windows. This produces a comfortable sense of enclosure for the pedestrian and a continuous storefront that attracts and encourages the pedestrian to continue along the street.

At least one of the handicap accessible routes required by the building code should be the same as the principal public entrance. If parking is located at the rear or within the building, there should be two accessible routes, one from parking and another in front. All accessible routes should extend from within the building to the handicapped parking spaces or the public sidewalk without interruption.

Corner buildings are

highly visible and require special care in their design to anchor a district, serve as landmarks and to provide a sense of enclosure for the intersection.

Use awnings or canopies to reduce glare on storefront glass and to shelter the pedestrian standing near the storefront. Cantilever awnings and canopies from the building face so as to keep the sidewalk as clear and unobstructed as possible. Care should be taken to preserve views down the street.

If the building face cannot have windows, the blank wall should be treated with decorative architectural finishes, screens, display cases, sculpture, murals, or plant materials to create an interesting walking environment.

Treat all publicly visible facades of a building equally in terms of materials, colors, and design details. The building should have a 'finished' appearance on all visible sides.



Awnings can be used to reduce glare on large store front windows. Generous window openings, awnings, and architectural details create visual interest at the pedestrian level.

IX. SIGNS

Signs include private business and public regulatory signs. All signs installed on buildings or included in the public right-of-way must conform to the city Sign Code. A sign permit must be obtained from the Building Inspection Department prior to installation. These guidelines supplement the Sign Code regarding the design and placement of signs.

A. Business Signs

Signs are important to the success of most businesses. They identify the business to the driver and pedestrian and, if well designed, can harmonize with the street and enhance the image of the district.



Streetscape improvements along 2600 West 32nd Avenue included coordination of signage among all the businesses.

Guidelines Sign Placement

Colors, materials, sizes, shapes and lighting of signs should be compatible with the architecture of the building, the business it identifies and the character of the surrounding area.

1. Lettering should be simple, legible and well proportioned for clear communication.

1. Signs on commercial buildings should fit within existing features of the building's facade.

2. Sign location should not detract from or hide significant architectural details of the building.

3. The number of signs should be limited to avoid clutter. Too many



Curtis Street was known as Denver's "Theater Row" in the early 1900's. Vertical signs lit the area and created a festive atmosphere. *Courtesy Denver Public Library, Western History Department, H.M. Roads.*

2. Sign shapes should be simple and straightforward to communicate well. Signs as symbols are encouraged because they are easily read and add to the vitality of a storefront.

3. The light levels of a sign should not overpower other signs on the street or the facades of nearby buildings.

4. A revocable permit must be obtained by the business owner for all signs incorporated into canopies, awnings or signs that project over the public right-of-way.

5. Sign materials should be durable and easy to maintain.

signs detract from the district's appearance and even reduce business.

4. Wall and window signs should be placed only near or within the first story window area of a building.

5. If signs identifying a business district or historic district are included, they should be located near intersection entry points.

6. Consider designing new buildings with built-in sign bands to integrate signs with the architecture.

B. Regulatory Signs

Generally, standard regulatory and parking signs are installed by the city. These can be coordinated with new streetscape design by



The window sign placed above the front entry fits within the existing historic character of the building.

contacting the Transportation Division of Public Works. Proposed signs adjacent to parks and parkways should be reviewed by the Department of Parks and Recreation.

Regulatory signs are often added after a streetscape is completed. The signs should not be placed without coordination with the property owners and project designers.



Diagonal parking and loading create congestion on Market Street, ca. 1948. Courtesy Denver Public Library, Western History Department.

X. PARKING

Parking in the right-of-way is common in Denver residential neighborhoods. It should occur in the street, along the face of a consistent curb line. Tree lawns should not be removed for parking in any residential neighborhood. The consistent, repetitive placement of street trees, and the continuous line of curb, tree lawn and detached sidewalk are more important than the provision of a few additional parking spaces.



On-street parking can be accommodated within most commercial districts without interrupting the continuous line of the curb, street trees, and walkway. In addition, the parking lane provides another layer of separation between the pedestrian and moving traffic.

Integrating parking into the commercial areas is an important aspect of streetscape design. The Denver Zoning Code addresses the specific requirements for parking for each zone district and use.

A. Parking Structures

Parking structures should be designed so that they are compatible with buildings in the area.

G u i d e l i n e s

1. The design of parking structures should be architecturally integrated with the design and structure of the buildings they serve. Treat the facade of the parking structure to match the facade of adjacent buildings.



Locate retail at the street level of parking structures for visual interest along the pedestrian walkway.

2. Make the horizontal and vertical elements of the parking structure facade similar to those of adjacent structures. Also make the spacing and proportions of openings in the facade similar to those of windows on adjacent buildings.

3. Use materials and textures on the facade of a parking structure similar to those on adjacent buildings.

4. Provide clear signage to direct the driver to the parking structure.

5. If possible, locate retail or service uses along street frontage, with parking provided below-grade or as surface parking behind building.



Walls and landscaping can be used to define the separation between pedestrian and parking space and improve the appearance of parking lots from the street.

B. Parking Lots

Parking lot location and design should minimize disruption of the continuity of retail frontage along the sidewalk. Walls, fences and landscaping should be used to define pedestrian space as separate from parking space.

G u i d e l i n e s

1. Where parking is located on a site with a building, locate the parking at the rear if possible. This will minimize gaps in the continuity of building faces along the sidewalk.

2. Parking lots should not be placed at the sidewalk edge because it breaks the continuity of retail on the street, particularly if a parking lot is placed on a corner lot. Corner lots are better utilized if buildings are located on them, with parking behind or to one side.

3. If access to parking interrupts the continuity of ground floor retail between multi-story buildings on a block face, continue the upper floors over the access drive to create continuity of facades.

4. The number of curb cuts should be minimized to reduce conflicts between pedestrians and automobiles and to increase the opportunities for landscaping the planting strip between the sidewalk and curb. Where possible, adjacent owners should share curb cuts.

C. LANDSCAPING

Landscaping improves the appearance of parking lots. In addition to differentiating pedestrian space and auto space, it complements the surrounding properties and improves environmental conditions. All applications for landscape plans are reviewed by the Department of Zoning Administration. See “Rules and Regulations for the Landscaping of Parking Areas” (Section 6) for the landscape review procedure.

Berms used as a means to screen parking lots are seldom effective due to limitations of space. Sloped berms create numerous other maintenance and resource problems, especially when covered with turf. Screening can be more effectively accomplished through a wise choice of plant material, fences, railings and low walls.

Plant Materials

1. All plants should be suited to the Denver climate and suitable for conditions of the parking area.
2. Street trees should be included in the tree lawn in front of all new parking lots. Trees should be evenly spaced to provide a unified appearance. Refer to street trees in this manual.
3. Planting areas must be covered by turf, groundcovers or low growing shrubs that are at least 6 inches tall or higher where screening cars is desired.
4. No artificial trees, shrubs, turf or plants may be used as landscape for any parking area.
5. Groundcovers in planting areas may include brick pavers or interlocking pavers. Materials should be consistent with adopted neighborhood plans and streetscape design.

6. Plain concrete, patterned (stamped) concrete and asphalt paving are not acceptable groundcovers in required landscape areas.

Screening

1. If a parking lot or parking structure is next to a sidewalk or is clearly visible from the public right-of-way, a five (5) foot wide landscape buffer or a fence and a two (2) foot wide buffer combination is recommended.
2. The design of visual screens and landscaping along the parking lot edge should be dense enough to screen adjacent residences and public rights-of-way from headlight glare and the movement of traffic generated by vehicles using the parking area.
3. Fences, planter boxes and low walls can help screen the views of cars as well as soften the appearance of the street.
4. Planter boxes and walls must be made of brick, masonry, textured or aggregate concrete. Chain link or wire mesh may be used only in combination with plant material of sufficient density to create a screen. The fence should be either black or green to blend with the plant materials.

5. Solid fences, hedges or walls along lot lines abutting the public right-of-way may not exceed three feet in height to allow visibility into the lot for security.

Lighting

1. Parking areas must have properly designed lighting. A qualified lighting designer or the property owner must certify that the proposed lighting will produce the minimum footcandle levels required by the Zoning Administration. See Rules and Regulations for the Landscaping of Parking

Areas (Section 5) for requirements.

2. Light fixtures should be of the cut-off (down cast) type, equipped with house side guards and mounted in heights and locations to minimize off-site glare. Fixtures must be approved by the Zoning Administration.

3. The owner is responsible to maintain light fixtures and light levels to illuminate the parking areas from dusk until midnight or one (1) hour after the end of business hours, whichever is the later of the two.

Walkways

1. Private or public walkways should have a minimum width of 5 feet, exclusive of vehicle overhang which is typically 2 feet, 6 inches.

Irrigation

1. Landscaped areas must have a properly designed irrigation system providing full coverage on all plant material areas. Impulse sprinklers, pop-up and surface spray sprinklers or other means appropriate for the areas to be irrigated may be installed as determined by the Zoning Administration.

2. According to the Guidelines for Xeriscape Implementation, methods for harvesting runoff water for use on site are encouraged to reduce the need for potable water for irrigation and to reduce burdens upon storm drainage systems.

Maintenance

The property owners, their successors, heirs, and assigns are responsible for the proper maintenance of the landscaped area and parking lot subject to a landscape plan approved by the Zoning Administration.

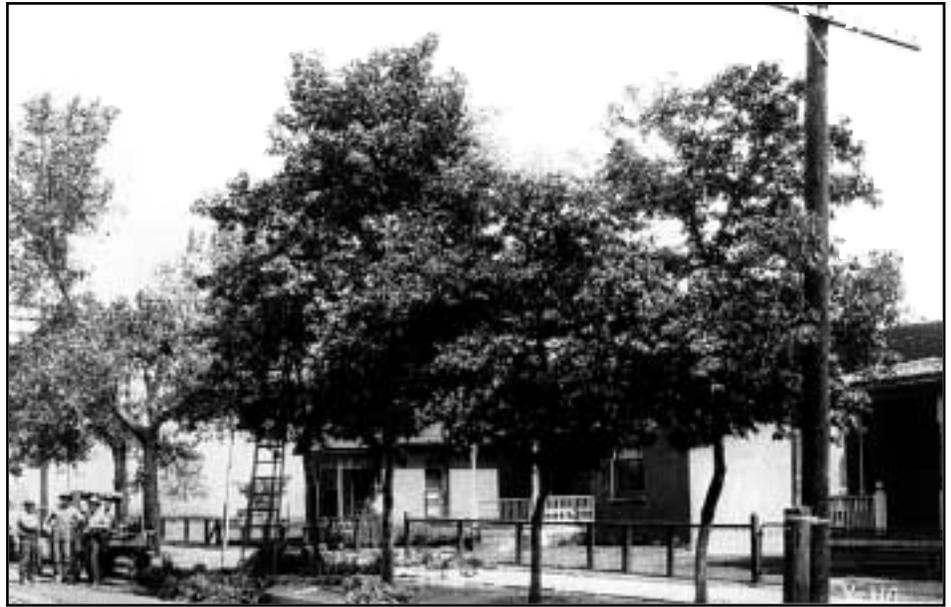
XI. MAINTENANCE AND IRRIGATION

The property owner, maintenance district or business improvement district is responsible for the proper maintenance of landscape areas in the public right-of-way fronting their property. Maintenance includes mowing, weeding, cleaning, snow shovelling, raking, re-seeding and otherwise repairing all the landscape and paving materials in the right-of-way including sidewalks and street trees. The only exception to this occurs in the case of designated parkways, where the Parks and Recreation Department performs landscape maintenance of the medians. Median maintenance by the Parks and Recreation Department is not a given when new medians are established. Each case must be handled individually, either by ordinance or by negotiated agreement to establish how funding for maintenance will be provided. Contact the Department of Parks and Recreation for more information.



Proper maintenance can create a friendly and pleasing neighborhood character.

Residential property owners who participate in a tree planting program are required to sign a Department of Parks and Recreation Maintenance Agreement for any street trees planted in the public right-of-way. Property owners are responsible for the watering of the trees and tree lawn in front of their property and the areas



Tree trimming on the 3900 block of Jason Street, 1922. *Courtesy Colorado Historical Society*

between their property and the street. This area may be watered manually, however the inclusion of a properly designed and maintained automatic irrigation system can reduce maintenance, reduce water consumption and insure the health of lawns, trees and plantings. Automatic irrigation systems are therefore highly recommended for all plantings in the public right-of-way.

Dry wells are recommended for areas in which property owners are willing to be responsible for hand watering in residential and small commercial areas only. This water-conserving irrigation technique involves watering the tree manually with a hose the first three or four years until the tree is established enough to survive on its own. Winter waterings are highly recommended for young trees during dry winters. Refer to Appendix A.

Landscaping must be maintained continuously. This includes necessary watering, weeding, pruning, pest control and replacement of dead or diseased plants. Replacement plants should be the same type as used in the approved plan. Replacement time should not exceed one (1) year.

Listed below is a general overview of maintenance and irrigation issues. Please refer to the following documents for more specific information (see Bibliography):

1. Denver Landscape Design and Maintenance Guidelines for Water Conservation.
2. Appendices B, C and D.
3. Irrigation Manual and Standard Specifications (for projects maintained by the Department of Parks and Recreation).

The following guidelines should be considered for the general upkeep and maintenance of public right-of-way improvements:

A. Trees, Shrubs and Sod

Proper maintenance can prolong the life and beauty of landscaping. Basic care should include:

1. Monitor irrigation to avoid over-watering or under-watering.
2. Maintain tree spaces and landscaped areas including watering, cleaning, weeding, mulching, mowing, fertilizing and aerating when necessary.



Frequent mowing is an important aspect of turf maintenance.

3. Remove grates, paving materials or any other material installed in the tree space when maintenance on tree or tree roots is necessary, and properly reinstall when finished.

4. Replace grates or paving materials when damaged or destroyed.

B. Irrigation System

Commercial streetscapes should be irrigated with a properly designed irrigation system to cover all plant material in the public right-of-way. If only a few trees exist on the property, dry wells (hand watering) may be utilized but only with the approval of the City Forester and with a written maintenance agreement between the owner and the city.

Irrigation Design

Irrigation systems should be designed to permit turfgrass to be irrigated separately from all other planting areas. Turf irrigation zones should be further separated by slope, aspect and turf type water needs. Automatic irrigation controllers should have repeat cycle capability to permit moisture

to penetrate into the soil rather than run-off.

1. Irrigation schedules should be set when pedestrians are not likely to be present.

2. Rainfall or soil moisture sensors, check valves, pressure reducers and flow sensor valves are all desirable to reduce water waste.

3. Sprinkler heads in the same zone should have the same precipitation rates. Pop-up heads in turf should have at least a 4 inch riser height.

4. Controllers should have the capability to irrigate shrubs, flowers and trees separately from turf, and have time capability to permit effective use of low volume systems over longer cycles.

5. Perennial and ground cover areas may be irrigated with fixed riser or shrub pop-ups.

6. Pop-up risers should be fitted with low pressure and low volume spray heads. Shrubs and trees may be irrigated by drip or low volume spray heads.

7. Normal spray patterns should be confined to mass vegetated areas or root zones of plants.

8. Spraying of walks, decks, patios, driveways, buildings and fences should be avoided. If spraying of walks and bikeways cannot be avoided, the controller should be timed to spray at night to reduce conflicts with users.

Irrigation Maintenance

Irrigation is critical to the survival and growth of plant materials. It is important, therefore, that irrigation systems are cared for properly. Necessary start-ups, shut downs, periodic checks, adjustments and replacements of parts must be performed.

1. Check system completely at spring start-up. Repair and adjust heads.

2. Monitor and adjust system monthly throughout the season.

3. Properly shut down and winterize the system at the end of the season.

C. Lighting

It is critical that lighting is maintained and that continuous electrical service is provided. The following procedures should be implemented:

1. Maintain lighting control devices including timers, photocells, etc.

2. Replace damaged or missing light poles or parts within 30 days of damage.

3. Replace burned out bulbs or lamps within 10 days of burn out.

4. Perform general maintenance work including regular cleaning and painting when required.

D. Furnishings

Street furnishings must be maintained to remain attractive and functional amenities. Painting, cleaning and repairing will help ensure a more desirable and enduring environment.

E. Sidewalks

Cracked, broken or missing sidewalk paving is hazardous to public safety. Recommendations for sidewalk upkeep are as follows:

1. Maintain concrete joints and replace sealant when necessary.

2. Remove snow when necessary.

3. Remove trash on a regular basis.

XII. APPROVAL PROCESS

A. Streetscape Implementation Process

The following is a step-by-step guide to completing streetscape projects, depending upon the source of funding (public or private):

Projects Constructed using Public Funds

- 1.** The Planning and Community Development Office informs neighborhood associations through publications regarding the availability of funding for streetscape improvements.
- 2.** Property owners or neighborhood associations requesting a streetscape project submit an application to the Planning and Community Development Office. It is reviewed by staff.
- 3.** For Community Development Agency projects the property owners or the neighborhood association present their project to the Mayor's Advisory Council, which, recommends projects to receive funding.
- 4.** The city advertises a Request for Proposal for architects or landscape architects to design the selected projects. Funded projects are awarded to designers chosen through a selection process.
- 5.** The designer, under the direction of The Planning and Community Development Office and Department of Public Works, works with the property owners or neighborhood association to prepare the project design.
- 6.** All property owners are responsible for maintaining right-of-way improvements adjacent to the

property. If appropriate, a maintenance district may be established. Prior to construction, commercial property owners are required to petition the Manager of Public Works to establish a maintenance district. (See Maintenance District section and Appendix F).

- 7.** A revocable permit application is made to the Manager of Public Works. Prior to construction, a revocable permit is required if a project includes physical intrusions occupying the public right-of-way.
- 8.** The city requests bids from contractors through an advertisement in local publications. A bid opening is conducted and a contract is negotiated.
- 9.** The city issues a "Notice to Proceed" to the contractor.
- 10.** A city-appointed project coordinator monitors the construction activities through completion of the streetscape project.
- 11.** Following construction, city staff monitors warranty items and follow-ups with the contractor to see that all items are completed and accepted. A reproducible as-built drawing should be turned over to the city and or owner before acceptance. All materials are required to have a two year warranty except plants, which must have a one year warranty.

Projects Constructed Using Private Funds

Steps for the implementation of privately funded projects are similar to publicly funded projects except that owners are responsible for the funding, employment and monitoring of architectural and construction services. Appropriate city permits and regulations apply to all projects. Maintenance must still be addressed either by individual property owners, a Maintenance District, or a Business Improvement District.

Improvement District.

B. Revocable Permits

A revocable permit is an important part of streetscape projects because it serves as a license for the property owner to occupy the public right-of-way.

Prior to construction of streetscape projects in which a structure or other related items will encroach onto the city right-of-way or in which permanent occupancy of the right-of-way will exist, property owners are required to obtain a revocable permit.

This permit serves to protect the public, the city and property owners from any bodily injury or property damage that might result from streetscape improvements.

The city reserves the right to revoke a permit at any time for reasons regarding public safety, the owners failure to renew a permit, or other reasons. (Refer to Right-of-way Engineer, Department of Public Works.)

There are two types of revocable permit available. The procedures and regulation regarding both are as follows:

Revocable Permit by Ordinance (Ordinance Revocable, Type A)

Revocable permits by ordinance are required where buildings encroach into or overhang the public right-of-way; such as pedestrian crossovers, tunnels under the street, underground parking structures; and any improvements which affect the movement of automobile, pedestrian, and bicycle traffic between the curb lines of a street, such as traffic diverters.

Revocable permits by ordinance must be obtained before construction can begin. This application and approval process for securing a permit by ordinance include:

Submit a letter requesting the revocable permit, addressed to the Manager of Public Works. Refer to Appendix D for a sample letter. This letter requires the following information:

- a. The intention of the permit.
- b. A set of architectural plans is prepared by a registered professional architect indicating location of the improvements. Upon review of the application by various city departments including Engineering and Transportation a recommendation may be made to City Council for approval. A \$300.00 fee is required when recommendation is made to City Council.

Because of the length of time involved in obtaining a revocable permit by ordinance, a temporary permit is available. This temporary permit allows work to begin until the ordinance permit is received. A temporary permit is available only when an ordinance permit is ready to go to council; it is not possible to apply for a temporary and a revocable ordinance permit at the same time. Application can not be made until initial review is made by the Engineering and Transportation Departments. The cost for a temporary permit is \$50.00 in addition to the \$750.00 processing fee and the \$300.00 ordinance fee.

Exception: for city-funded projects, the processing and ordinance fees (\$1,050.00) are paid by the city using project funds.

All revocable permits by ordinance must be renewed annually at which time a fee of \$50.00 is required in addition to current proof of insurance. This renewal fee must be

paid by property owners.

Note: revocable permits by ordinance transfer from one owner to another when property is sold.

For additional information contact the Right-of-Way Engineer, Engineering Division .

Revocable Permits by Letter (Letter Revocable, Type B)

Revocable letter permits are required for temporary or less extensive physical objects, other than trees and turf, occupying the public right-of-way. This type of revocable permit generally applies to commercial streetscape projects which include items such as planters, benches, bollards, trash receptacles, pedestrian lighting, signs, tables, seating, awnings, fountains, fences, walls, irrigation systems, meter pedestals, etc.

Revocable letter permits must be obtained before construction can begin. To obtain a revocable permit by letter:

Write a letter requesting the revocable permit, addressed to the Manager of Public Works. This letter requires the following information:

1. The intention of the permit.
2. A set of architectural plans showing location of improvements and prepared by a registered architect or engineer.

Upon approval, a first year non-refundable processing fee of \$75.00 is required. Evidence of liability insurance with the minimum limits of coverage of \$50,000/\$100,000 for bodily injury and \$5,000 for property damage covering the location of public property for which the streetscape improvements and revocable permit are requested. The city must be named

as additional insured on the policy with a thirty (30) day notice of cancellation.

Exception: for city funded projects, the processing fee of \$75.00 is paid by the city using project funds.

A letter permit is issued for one year, after which, property owners must submit a renewal request, current proof of liability insurance and an inspection fee of \$25.00 annually. This fee must be paid by property owners.

C. Maintenance Districts

The formation of a maintenance district is required generally when streetscape projects are at least one block in length (or two end blocks) and include improvements such as pedestrian lights, benches, trash receptacles, planters, irrigation lines and other elements.

Projects involving only the addition of grass trees and paving do not require the establishment of a maintenance district. For such improvement projects, however, the city requires a signed letter of agreement expressing the commitment of property owners to maintain improvements in the right-of-way along their property. All agreements regarding maintenance must be made prior to the preparation of final design and construction documents.

Commercial property owners are generally required to participate in a maintenance district. Property which cannot be assessed, i.e., non-profits, foundations, state and federal property, cannot be required to participate in maintenance districts and the city does not pay maintenance costs for these categories of owners. The other property owners in the district must pick up the cost of maintaining the property which cannot be assessed.

If a streetscape project involves commercial properties in less than a one block (or two end blocks) area or otherwise does not meet the criteria listed above, the establishment of such a district may not be required. The formation of a maintenance district will be considered on a case-by-case basis. The district or individual property owners involved in the project will be required to obtain a revocable permit to insure proper maintenance of the right-of-way improvements other than paving, grass and trees along their frontage.

Process for Establishing a Maintenance District

A maintenance district requires a Board of five members; at least three members must be owners of real property within the district or representatives of owners of such property or officers of corporations owning such property. One member of the Board must be the Manager of Public Works. The Board of property owners and the Manager of Public Works will then determine the maintenance budget based upon the estimated total annual costs of upkeep. Property owners will be assessed on an annual basis according to the lineal footage of frontage facing the project for their proportion of the total maintenance budget.

The city will not construct any extensive public improvements without the assurance that the property owners will participate in a maintenance district. Upon completion of a cost/benefit analysis a series of events must occur prior to the actual establishment of a maintenance district. The project coordinator together with the participating merchants will be responsible for completing the following procedure:

1. Petitioning:

A petition, accompanied by a cost/benefit analysis or lineal footage proportion, identifying the properties to be affected, will be circulated to property owners. When the property owners representing more than 50 percent or more of the assessed valuation of real property, exclusive of improvements have signed and filed the petition, the Manager of Public Works will advertise the notice of a proposed local maintenance district for remonstrances (protests or objections) to be heard not less than twenty (20) days after the last publication of the notice.

(Note: The Manager of Public Works may, in his official capacity, initiate and propose the establishment of such a district without receiving a petition.)

2. Property Owner Protests:

If remonstrances are filed by property owners representing 50 percent or more of the assessed valuation of real property within the proposed district, exclusive of improvements, the maintenance district will not be established whether the district was initiated by petition or proposed by the Manager of Public Works.

3. Creating an Ordinance for Submittal to Council:

If remonstrances filed are not sufficient to prevent the establishment of the maintenance district, the Manager of Public Works will usually approve the creation of a maintenance district and will submit an ordinance to City Council authorizing the establishment of the district. This ordinance will go through Council twice, usually on consecutive Mondays.

4. Appointment and Initial Meeting of the Board:

The Board for the maintenance district shall consist of five (5) members, including the Manager of Public Works and at least three (3) members who are property owners within the district. They must then meet to approve the first year's annual budget.

5. Hearing for Assessment Protests:

Once the budget has been approved, the Manager of Public Works will publish a notice to the property owners specifying each owner's proposed assessment. Objections or complaints can be filed at any time within twenty (20) days and will be heard by Council, acting as a Board of Equalization, before the ordinance assessing the cost is passed.

6. Assessment Ordinance Submitted to Council:

After all objections have been considered by Council, any modifications of the proposed levy will be sent to the Manager of Public Works, who will prepare an assessment ordinance and submit it once again to Council and upon completion of the second reading, a maintenance district will be established.

For a copy of the actual ordinance, see Appendix F.

D. Business Improvement Districts

An alternative to the formation of a maintenance district is to form a Business Improvement District (BID). A BID may assess both real property owners (landowners) and personal property owners (retailers) to raise funds for maintenance, among other things. A BID is a quasi-governmental body, empowered to perform routine maintenance, centralized retail marketing and management and even land acquisition, and development .

State House Bill No. 1182 provides for the creation, operation and financing of Business Improvement Districts. A Business Improvement District is created within a municipality upon the petition of owners of real and personal property in the proposed service area of the district. The petition is filed in the office of the Clerk for that particular governing body. A public hearing is held and an ordinance is prepared that establishes the District.

The district has the power to manage, control and supervise all business affairs of the district including acquisition, operation, financing, installation and construction of district improvements, as well as the funding and operation of district services. District services include planning, promoting, marketing, managing, business recruitment, security, maintenance, as well as design and public events assistance. The district board has the power to fix, increase or decrease rates, tolls or charges for any services and improvements. The board may enter into contracts and agreements, hire employees or retain agents, borrow money, incur indebtedness, sue and be sued, and refund as well as sell bonds. The board may appoint an advisory board of property owners locat-

ed within boundaries of the district to advise them on local concerns and issues.

For more information on the formation and operation of Business Improvement Districts, refer to [Business Improvement Districts Formation Process](#), The Office of Planning and Community Development or to the [Districts and Alternate Government Financing Mechanisms](#), Division of Local Government, State of Colorado.

E. Individual Commercial Maintenance Agreements

There are commercial streets where the uses are highly diverse and where the goals of the property owners are very different.

Contiguous uses such as: a public school, a retail business, a non-profit institution, a library or a residence may not share similar goals related to a streetscape project. It may not be feasible for these types of unrelated uses to obligate themselves to a Maintenance District. If so, individual maintenance agreements must be signed by each owner who participates in the project. In addition, revocable permits are required where applicable. Refer to Appendix C.

GLOSSARY

AASHTO

American Association of State Highway and Transportation Officials. The organization produces guidelines that transportation designers often refer to in evaluating street design and streetscape issues.

Amenity Zone

Paved area along the back of the curb in a commercial streetscape that organizes trees, plantings, furnishings and lighting. It may range from 4 to 12 feet wide. Ample clear space must be provided between the amenity zone and building facades on the sidewalk for pedestrian circulation.

Attached Sidewalk

A sidewalk attached directly to the back of the roadway curb.

Bicycle Lane

A portion of a roadway which has been designated for preferential or exclusive use by bicycles. It is distinguished from the portion of the roadway for motor vehicular traffic by a paint stripe, or other similar device.

Bikeway

Any road, path or way which is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes. Sidewalks are generally not designated as bikeways.

Bollards

Any small vertical element such as a decorative steel or iron pole, or a short concrete column intended to allow pedestrian traffic but to restrict vehicular traffic. Bollards are normally used in groups to indicate an edge between pedestrian and vehicular areas.

Boulevard

A general term for major streets that have tree lawns and street trees or street trees in wells with grates. Boulevards are generally wide, continuous and link several districts together. See also Parkways.

Branching Height

The height of the lowest branch of a tree where it overhangs the sidewalk or curb.

Caliper

The diameter of the trunk of a tree. A 3 inch caliper tree has a diameter of 3 inches measured 6 inches above the ground.

CCOD

City and County of Denver

CDOT

Colorado Department of Transportation

Character

The distinctive structure, form, materials and style of a place. Character is apparent to people as a result of the landscape, buildings, trees, spaces, furniture, materials, colors, and organization of the area.

Commercial Street

Any street that is primarily shops, stores, offices or services. Commercial streets range in scale from local retail centers such as Old South Gaylord to major arterials such as Federal Boulevard.

Curb Cut

Any break in the curb for a vehicle entry or driveway apron.

Curb Ramp

A sloping area of sidewalk allowing access for bikes, wheelchairs and people with disabilities, generally located at corners. See *Street Development Standards*, Dept. of Public Works.

Design Guidelines

Minimum guidelines or recommendations intended to guide the design of streets in the city. Where conditions are not specifically addressed in the guidelines, it is the responsibility of the proponent to show that the proposed design solution meets the intent of the most closely related guidelines.

Detached Sidewalk

A sidewalk that is not attached to the street curb. Detached sidewalks generally occur in residential areas and are normally separated from the curb by a tree lawn.

Dry Well

A gravel sump or closed drain below a tree that provides for water storage and seepage into the root zone. Trees in dry wells must be hand-watered.

Entry Walks

The narrow walkway in residential areas that leads from and is perpendicular to the curb and the detached sidewalk, crossing the tree lawn.

Face Block

The entire length of a block (on one side of the street) from curb to property line including the structures that front the street. This is a useful design term and as commonly used, refers to both the long or short side of a block.

Furnishings

Any of numerous types of street amenities, most commonly used on commercial streets. Examples are pedestrian lights, benches, newspaper vending boxes, trash receptacles, bollards, planters, tree grates, fences, railings, bicycle racks, mailboxes, fountains, kiosks and phones.

Groundcovers

Low plantings used instead of turf where space does not allow turf or where a more decorative affect is desirable. Ground covers are generally lower than 6 inches in height.

Kiosk

Any vertical structure which stands independently in the streetscape and is intended for the display of information or graphic material such as posters.

Leaning Rail

A simple railing intended to support a person leaning or partly sitting on it. Leaning rails are often used at waiting places such as bus stops.

Luminaires

Luminaires contain the lamp light source of lights, and can sit on poles or mount on walls. They are classified into five standard lighting types, depending on light distribution pattern.

Mature Tree

Any well-established tree of sizable caliper is considered mature. A 12 inch caliper tree would be considered a mature tree.

Median

The area of raised paving or planting running down the center of a street, separating the directions of traffic. A traffic island is a special type of median. When planted, the Denver Parkway Design Guidelines of the Dept. of Parks and Recreation apply.

Parkway

A type of boulevard that in Denver, is designated by the city as a parkway. Parkway generally have wide planted medians that are maintained by the Department of Parks and Recreation. A majority of Denver's parkway system is listed on the National Register of Historic Places.

Pedestrian Lighting

Special lighting that adds drama, character and light to pedestrian areas. Pedestrian lighting may consist of pole-mounted luminaires 14 feet or lower in height, lighted bollards or other low-level light sources.

Residential Street

Any street which is primarily residential in use, and usually not a major through street.

Right-of-Way

The boundary of public ownership of the street. The area between private property lines is generally referred to as the public right-of-way.

Scale

The perceived size of a building, space, or roadway in relation to a human or automobile. Scale affects the apparent size of street spaces and how comfortable they are for drivers and pedestrians. Architectural design details and overall organization of the street affect scale.

Sidewalk

A paved surface intended for pedestrians. Bicycling is prohibited by law on sidewalks and should not be included in sidewalk design.

Splash Strip

A 12-18 inch wide paved strip along the back of the curb that protects the median or tree lawn landscaping from sand and salt used in the roadway.

Step-out Strip

A 12 to 24 inch wide paved strip along the back of the curb to facilitate stepping in and out of vehicles parked at the curb (also called a landing walk by some agencies).

Stop Bars

Street pavement striping at intersections that indicates to drivers a safe stopping point, sometimes used in combination with pedestrian crosswalk striping.

Streetscape

A generic term referring to pedestrian and landscape improvements in the right-of-way generally between the curb and right-of-way line. A streetscape is generally associated with improved sidewalks, street trees, lighting, furnishings, and landscaped medians.

Street Light

Street lights are provided by the Public Service Company of Colorado and are primarily intended to light the roadway. They are generally 30 feet high or more.

Street Trees

Trees that line the street in a straight, regularly spaced row between the curb and property line.

Tree Lawn

The area of lawn or planting between the curb and the detached sidewalk.

Xeriscape

A total design concept by which sound horticultural and landscaping principles are applied to reduce water usage and maintenance in the landscape. It is not meant to reduce water needs to a minimum, nor is it meant to eliminate irrigation.

A G E N C Y D I R E C T O R Y

Department of Parks and Recreation	City Forester	964-2480
	Planning, Design and Construction	964-2530
	Parks Division (Maintenance)	964-2580
Planning and Development Office	The Denver Landmark Preservation Commission	640-2736
	The Denver Planning Board	640-2120
	Planning/Urban Design/Community Development	640-2736
	Zoning Administration	646-2191
Department of Public Works	Asset Management/Land Office Division	640-2532
	Building Inspection Division	640-5843
	Bicycle and Pedestrian Planner	640-1098
	Parking Management Division	640-3865
	Right-of-Way Engineer	640-5405
	Solid Waste Division	640-5115
	Streetlighting Administration (billing/permits)	640-5477
	Streetlighting Design Engineering	640-1084
	Transportation Division	640-1098
	Urban Design	640-4600
Wastewater Management Division	640-0584	
Denver Water Board	General Information	628-6000
	Engineering Services	628-6606
	Landscape and Maintenance Design	628-6343
	Sales and Taps	628-6115
Regional Transportation District	Planning and Development Department	299-9000
Public Service Company of Colorado	Engineering	571-6692
State of Colorado	Division of Local Government, Department of Local Affairs	866-2159
Colorado State University	Extension Turfgrass Specialist	1-491-7070
Colorado Department of Transportation	Bicycle Program Manager	757-9982
	Environmental Services/Landscape Section	757-9931
Mile-Hi Cablevision	Design Construction	778-2978
United States Postal Service	Mailbox placement	respective station
U.S. West	Design Engineering	451-2704

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18. *Zoning Ordinance*, City and County of Denver.
19. *Street Lighting Guide, Expanded Choices for Street Lighting*, Public Service Company of Colorado, 1991.
20. *Guide for the Development of Bicycle Facilities*, AASHTO Task Force on Geometric Design, 1991.
21. *Landmark Preservation Ordinance*, Denver Landmark Commission, Chapter 30 of the Revised Municipal Code, City and County of Denver, 1992.

A P P E N D I X A

WATERING GUIDELINES FOR NEWLY PLANTED TREES

In order to assure that your newly planted trees are healthy and vigorous you must water them regularly for the first two years or so. Many factors can vary the frequency and amount of water that your tree will require.

Factors to Consider:

1. Species of Tree
2. Soil composition and structure
3. Exposure to drying winds and sunlight
4. Irrigated or non-irrigated area

In general, newly planted trees should be watered once a week from April through October and approximately once a month through the winter. Again, weather conditions and soil will play a large role in this cycle. For example, if it rains well enough to soak the soil, then watering is not necessary that week. Check the soil by digging 2-3" down with your finger to see if the soil is moist or dry. If you press the soil between your fingers and it sticks together watering is not necessary. Furthermore, if the soil is sandy the tree will need more frequent watering.

During the winter trees should be watered once a month. If the soil remains unfrozen or if little moisture is present, trees will require more frequent watering, especially if they are evergreen. If the soil is frozen or there is a snow cover, additional watering is not necessary. Another critical time to water is in the spring when new leaves begin to form. In the second summer the trees should be watered approximately every 10-14 days depending upon the amount of moisture present.

In the third year, if there has been a lack of moisture, extreme heat or drying winds, watering may be necessary. Additional water may be required for trees in irrigated areas where the water is turned off for any extended period of time.

If you have any questions, please call Maureen Van Norden at **964-2544**. Thank you for your help in keeping Denver green.

A P P E N D I X B

Chapter 57,**VEGETATION**

Articles I, II, III,
Revised Municipal Code

ARTICLE I. IN GENERAL**ARTICLE II. PROTECTION OF TREES**

Secs. 57-1 - 57-15. Reserved.
Sec. 57-16. City forester.

The manager of parks and recreation shall employ a person to be known as the city forester, whose powers and duties are specified in this article.

Sec. 57-17. Trimming.

(a) The manager of parks and recreation, through the city forester, shall have the power to trim, spray, remove, plant and protect all trees, shrubs, vines, hedges and other plants upon the public right-of-way of any street, alley, sidewalk or other public place, or to require the owner of property abutting on the right-of-way of any street, alley, sidewalk or other public place to trim, remove or protect any tree, shrub, vine, hedge or other plant, which may project beyond the property line of such owner, onto or over public property at the expense of such owner.

(b) If the property owner refuses or neglects to trim, protect or remove any such tree, shrub, vine, hedge or other plant within ten (10) days after service of a written notice from the city forester so to do, the city forester may do or cause to be done the necessary work incident thereto, and the expenses thereof shall be collected from the owner of such property.

(c) It shall be unlawful for the property owner to fail or refuse to comply with the terms of the written notice provided for in subsection (b).

Sec. 57-18. Removal of dead or dangerous trees.

(a) It shall be the duty of the owner or occupant of any property to remove any dead trees or dead, overhanging bough dangerous to life, limb or property located on the premises of such owner or upon public property abutting the premises of such owner, upon service of written notice from the city forester so to do and within such reasonable time as specified in the notice.

(b) If such owner fails to remove same within the time required, the city forester is authorized to remove or to cause to be removed such trees or branches at the expense of such owner, and such expenses may be recovered in a proper action at law.

(c) It shall be unlawful for the owner or occupant of said premises to fail or refuse to comply with the terms of the written notice provided for in subsection (a).

Sec. 57-19. Removal or treatment of infected or infested trees.

(a) The manager of parks and recreation, through the city forester, is empowered to inspect any trees, shrubs, vines, hedges, plants, logs or branches existing or growing upon any property within the city. The city forester shall, from time to time, conduct surveys to determine if any destructive or communicable disease, or other pestilence exist which may be detrimental or endanger the good health and well being of trees or other plant life in the city.

(b) Upon discovery of any destructive or communicable disease, or other pestilence, or the breeding place of the disease or pestilence which endangers the growth, health, life or well being of other trees or plants or which is capable of causing an epidemic spread of communicable disease or insect infestation, the manager of parks and recreation, or the city forester, shall at once notify in writing the owner, agent or occupant of the premises whereon the same are located of the condition thereof, and direct such owner, agent or occupant to eradicate, remove or otherwise control such condition within a reasonable time to be specified in the written notice.

(c) It shall be unlawful for the owner, agent or occupant of the premises to fail or refuse to comply with the terms of the written notice provided for in subsection (b).

(d) Should the owner, agent or occupant of the premises fail or refuse to comply with the terms of the written notice provided for in subsection (b), the manager of parks and recreation and the city forester may enter upon the premises and remove, treat or otherwise care for infected or infested trees, shrubs, vines, hedges, plants, logs or branches in order to eradicate or control the same, or prevent the spreading of any threatening communicable disease or insect infestation at the expense of such owner, agent or occupant.

Sec. 57-20. Owner must treat trees when required.

(a) The manager of parks and recreation, through the city forester, is authorized to require any owner, agent or occupant of any premises to trim, spray, treat, remove or otherwise care for trees

or other plants upon that portion of the public right-of-way upon which such premises abut whenever the condition of such trees or plants interfere with, obstruct or in any way endanger the safe public use of streets, alleys, sidewalks or other public places. Whenever any tree or other plant upon that portion of the public right-of-way is in such condition as to jeopardize the health or well being of other trees or plants be virtue of insect pestilence or disease, the manager of parks and recreation, through the city forester, is authorized to require the owner, agent or occupant of premises which abut that portion of the public right-of-way to trim, spray, treat, remove or otherwise care for such trees or plants.

(b) Whenever the manager of parks and recreation, or the city forester, after investigation, determines that any trees or plants are in a condition described in subsection (a), they shall notify, in writing, the owner, agent or occupant of such premises that certain conditions exist which must be corrected within a reasonable time to be specified in the notice. It shall be unlawful to fail or refuse to comply with the requirements set forth in the notice within the item specified.

Sec. 57-21. Species of trees or plants to be planted on public property.

It shall be unlawful for any person to plant upon any public right-of-way or other public place in the city, any trees, shrubs or other plants other than as prescribed in rules and regulations promulgated by the manager of parks and recreation.

Sec. 57-22. Spacing of trees on public property.

It shall be unlawful for any person to space trees, shrubs or other plants upon the public right-of-

way or other public place within the city other than as prescribed in rules and regulation promulgated by the manager of parks and recreation.

Sec. 57-23. Permit required to plant or remove trees on public property.

Unless authorized by the manager of parks and recreation, it shall be unlawful for any person to cut, trim, spray, remove, treat or plant any tree, vine, shrub, hedge or other plant upon the public right-of-way or other public place within the city without first having obtained a permit from the city forester.

Sec. 57-24. Responsibility for damaging trees on public property.

(a) Any person who shall injure, damage or destroy any tree, shrub, vine, hedge or other plant situate upon the public right-of-way of any street, alley, sidewalk or other public place within the city shall promptly notify the manager of parks and recreation or the city forester of such fact and shall, within such reasonable time as specified by the manager of parks and recreation, or the city forester, repair or replace the same to the satisfaction of the manager of parks and recreation or the city forester.

(b) Should the person fail or refuse to repair or replace the damaged or destroyed trees or plants within such reasonable time, the manager of parks and recreation, or the city forester, shall do or cause to be done the necessary repairing or replacement, and the costs of this work shall be recovered from the person responsible for the damage or destruction by a proper action at law.

Sec. 57-25. Unauthorized use of trees on public property.

It shall be unlawful for any person, other than those persons authorized in writing by the manager of parks and recreation, or employees or officers of the city, or employees of a public utility, or a tree surgeon or any employees to climb, or to attach any lumber, fabric, wire, nails, bolts, cables, ropes, metals or any other materials foreign to the natural growth of any tree located within the public right-of-way of any street, alley, sidewalk or other public place.

Sec. 57-26. Service of notice.

(a) Service of the written notice required in this article may be made, and is complete upon depositing a copy of the written notice into the United States mail, postage prepaid, addressed to the owner, or an agent, at the address where the act or service is to be performed, or to the last known address of the record owner of the property.

(b) When the whereabouts or address of the owner of premises, or an agent, are unknown to the manager of parks and recreation or the city forester, service of the written notice required herein may be made by mailing the written notice to the occupant of the premises in the manner aforesaid.

Sec. 57-27. Rules and regulations.

The manager of parks and recreation shall have the power to promulgate rules, regulations and specifications for the trimming, spraying, removal, planting, pruning and protection of trees, shrubs, vines, hedges and other plants upon the public right-of-way of any street, alley, sidewalk or other public place in the city.

Secs. 57-28 - 57-40. Reserved.

ARTICLE III. MAINTENANCE OF LANDSCAPING AND CUTTING OF WEEDS

Sec. 57-41. Maintenance of landscaping.

(a) It shall be the duty of the owner, agent or lessee of any real property located within the city to provide for regular weeding, pruning and other maintenance of all plantings located on his private property adjacent to any public right-of-way. Plant materials which exhibit evidence of insect pest, disease or damage shall be appropriately treated, and dead plant materials shall be removed or replaced.

(b) It shall be the duty of the owner, agent or lessee of any real property abutting a constructed public right-of-way to provide for landscaping and maintenance of any right-of-way area between his property line and the curb line or designated roadway. The area shall be maintained in accordance with rules and regulations adopted by the manager of public works.

Sec. 57-42. Cutting of weeds.

Weeds shall be kept cut to a height of not more than six (6) inches. It shall be the duty of the owner, agent or lessee of the property where the weed growth exists to cut the weeds on the property and also to cut the weeds on alleys abutting behind the property to the middle of the alleys and on the sidewalk areas, including any right-of-way area between the property line and the curb line or designated roadway. If such cutting weeds is not accomplished, the manager of public works may, after notice to persons of record interest in the property, order the cutting by or in behalf of the city and the procedures outlined in section 57-43 for collection of the costs and expenses thereof shall apply in addition to the penalties

provided by this Code. Weeds shall not be permitted to remain upon the ground after cutting but shall be removed.

Sec. 57-43. City's lien for costs.

(a) If the owner, agent or lessee shall fail within thirty (30) days after billing to pay the costs and expenses of weed cutting by the city, a lien may be assessed against the property. The manager of public works, to initiate such lien, shall certify a statement thereof to the manager of revenue, who shall assess and charge the same against the property involved and collect the same due, together with interest at the rate of interest established by law for delinquent real property taxes.

(b) The liens created hereby shall be superior and prior to other liens, regardless of date, except liens for general and special taxes.

Sec. 57-44. Service and notice.

Service of the notice required in section 57-42 may be made by registered or certified mail, return receipt requested, and service shall be deemed complete upon delivery. If the address of a person to be notified is unknown or the receipt of a notice which has been mailed is returned unsigned, such notice may be served by posting the same on a conspicuous place on the property upon which the weeds are located, in which event service shall be deemed complete as of the moment of posting.

Secs. 57-45 - 57-60. Reserved.

ARTICLE IV. TREE SERVICE DIVISION 1. GENERALLY

Sec. 57-61. Name and address to be displayed on vehicles and equipment.

All automobiles, trucks, trailers or other vehicles operated by any licensee for the transportation of the equipment used by the licensee in such business, and all self-propelled, drawn or towed equipment used by any licensee in such business, shall have the name and address of such licensee displayed on both sides thereof in plain and legible figures and letters not less than three (3) inches in height, which shall be kept in such condition as to permit the same to be readily distinguished and read at a distance of at least sixty (60) feet, and it shall be unlawful and a ground of revocation of the license for any licensee to operate any such vehicle or cause any such equipment to be operated or drawn or towed upon the street, alleys or other public ways or places within the city unless or without the same being so displayed thereon.

Sec. 57-62. Rules and regulations.

The manager of parks and recreation may adopt reasonable rules and regulations governing those aspects of the conduct of the business licensed in this article, and of any and all parts thereof, directly affecting the public health and safety, and requiring the use of such safety appliances, apparatus and equipment as are reasonably necessary for the protection of the workmen engaged therein, the public and public and private property, and it shall be unlawful for any licensee hereunder to violate, or fail, neglect or refuse to comply with, any of such rules or regulations.

Secs. 57-63 - 57-70. Reserved.

DIVISION 2. LICENSE**Sec. 57-71.** Required.

It shall be unlawful for any person to engage in the business within the city of planting, cutting, trimming, pruning, removing, spraying or otherwise treating trees, shrubs, or vines, or applying herbicides, weedicides, insecticides, fungicides, soil conditioners or fertilizers by spraying or disseminating any such materials by any device other than by hand tools not actuated in whole or in part by compressed air, gas, water or mechanical means or source without first procuring a license therefor from the director of excise and licenses.

Sec. 57-72. Application.

The application for every license to engage in business under this division shall specify the types, classifications or kinds of service, constituting all or any part or parts of such business, which the applicant desires to perform or render if the same be issued and for the performance and rendition whereof the applicant desires to be licensed.

Sec. 57-73. Fees.

Application and license fees under this division are prescribed in section 32-123.

Sec. 57-74. Examination.

Before any license shall be issued under this division, the application therefor shall be submitted by the director of excise and licenses to the city forester, who shall thereupon examine the applicant for such license, either orally or in writing or partly orally and partly in writing as the city forester in the forester's discretion deems proper, covering the applicant's qualifications and competency to engage in the types, classifications or kinds

of service for the performance and rendition whereof the application discloses that the applicant desires to be licensed, and who shall require such demonstration of actual practical ability and competence or the furnishing of such evidence of previous satisfactory experience as the city forester, in the forester's discretion, deems proper. The city forester shall return to the director of excise and licenses the application, with endorsement of approval for the issuance thereof as to any and all of such types, classifications or kinds of service as the city forester shall be satisfied, from such examination, and such demonstration of practical ability and competence or evidence as to previous satisfactory experience, the applicant is qualified and competent to perform, and with endorsement, accompanied by a written explanation thereof, of disapproval as to all other such types, classifications or kinds of service, if any. No such license shall be issued to any applicant therefor for any time, classification or kind of service, constituting all or any part or parts of such business in which such applicant is not qualified and competent to engage. The director shall give due consideration to and may accept the endorsement of approval or disapproval of the city forester, as to the qualification and competency of any applicant, and if the director shall issue or refuse to issue any such license other than in accordance with such endorsement, the director shall, in writing, advise the manager of parks and recreation as to the reasons for the action in the premises if and to the extent that the same is predicated or based upon disagreement with the findings of the city forester or the results of the examination conducted by the city forester.

Sec. 57-75. Insurance prerequisite to issuance.

No license shall be effective and no such license shall be issued under this division until the applicant or licensee shall present to the manager of parks and recreation a satisfactory public liability insurance policy covering all operations of the applicant or licensee in such business in the city, in the sum of at least twenty-five thousand dollars (\$25,000.00) for each person injured and not containing a limitation of liability of less than fifty thousand dollars (\$50,000.00) in case of injury to two (2) or more persons in any one accident, and in the sum of not less than one thousand dollars (\$1,000.00) for damage to property. Such policy may be written to allow the first fifty dollars (\$50.00) of liability for damage to property to be deductible. Should any policy be canceled, the city shall be notified of such cancellation within ten (10) days after such cancellation is effective, and a provision to that effect, which shall also place upon the company writing such policy the duty to give such notice, shall be incorporated in each such policy. If any such insurance policy at any time fails, in the opinion of the manager of parks and recreation to comply with the provisions hereof or to afford reasonably satisfactory protection to the persons intended to be protected thereby, the manager shall, in writing, so notify the licensee and the director of excise and licenses, and failure to maintain the insurance required hereby shall be a ground for revocation of any such license, or in the discretion of the director, for the suspension thereof until the insurance required hereby be so furnished, and it shall be unlawful for any person to engage in business while the license so to do is for any reason suspended or after the same is for any reason revoked.

Sec. 57-76. Contents of license.

(a) Every license issued under this division shall show upon its face, in addition to the requirements of chapter 32, the types, classifications or kinds of service, constituting all or any part of parts of such business, in which the licensee therein named is thereby licensed and authorized to render or perform.

(b) The issuance of the license shall entitle and authorize the licensee therein named to engage in only such types, classifications or kinds of service constituting all or any part or parts of such business as shall be designated or shown upon the face of such license, and it shall be unlawful, and a ground of revocation of such license, for the licensee to engage in any other or different type, classification or kind of service constituting all or any part of parts of such business.

A P P E N D I X C

SAMPLE
COMMERCIAL
STREETSCAPE
PROJECT
MAINTENANCE
AGREEMENT

Maintenance agreements are required for funding of all commercial neighborhood streetscape projects. The following agreement shall be in place prior to constructing the project.

We the owner(s) . (NAME)
owning certain property located at
(ADDRESS)

hereby agree to maintain the improvements that will be made within the public right-of-way of .

The following actions will be taken by property owners or their agents to guarantee proper maintenance of right-of-way improvements:

- A. Apply for a revocable permit from the Manager of Public Works, Right-of-Way Engineer's Office for improvements made in the public right-of-way, if necessary.
B. Maintain in good and safe condition any improvements located in the right-of-way in front of their business.
C. Maintain a clean and attractive appearance of their business street frontage including the right-of-way area.
D. Property owners agree to share the annual costs for maintenance and utility costs (electrical and water) of the right-of-way improvements. Costs shall be

shared proportionally, based on the property line frontage for improvements for each separate commercial property.

E. Property owners agree to meet as often as needed to evaluate the maintenance of improvements and to take appropriate action to insure proper maintenance.

F. In the event that improvements are not properly maintained by tenants, property owners agree to assume responsibility for such maintenance.

G. The property owner is responsible for informing subsequent purchasers of the property that this agreement is binding upon them also. The property owner will notify the Director of Planning and Community Development of a change in ownership.

We have read the above maintenance agreement and understand the commitment required of property owners concerning right-of-way improvements installed by the City.

Signatures

subscribed and sworn to before me this ___ day of .19_____,by_____,my commission expires:_____

Notary Public_____

A P P E N D I X D

Chapter 49,

REVOCABLE PERMITS

Article VIII

Revised Municipal Codes

ARTICLE VII.

PRIVATE DESIGNING,
PLANNING, CONSTRUCTION,
RECONSTRUCTION AND REMOD-
ELING

DIVISION 1. GENERALLY

Sec. 49-161. Rules and Regulations.

The manager of public works shall have the authority to make and promulgate such rules and regulations as the manager finds necessary for the administration and enforcement of this article not inconsistent with the Charter and ordinances.

DIVISION 2. PERMIT

Sec. 49-171. Required.

It shall be unlawful for any person to design, plan, construct, reconstruct or remodel any general public improvement not performed by the department of public works or under contracts let by that department without obtaining a permit as provided in this division.

Sec. 49-172. Application.

The person intending to design, plan, construct, reconstruct or remodel any general public improvement shall file a written application with the manager of public works, signed by the owner of the property involved, or an authorized agent, and the application must be accompanied by the following:

(1) A general description of the work proposed to be done, together with its location;

(2) A statement of the estimated cost of the work;

(3) If the proposed work is to be done in the public way, evidence that the land is owned by the city or dedicated to public use;

(4) An application fee in the amount of ten dollars (\$10.00).

Sec. 49-173. Conditions.

No application for permission to design, plan, construct, reconstruct or remodel any general public improvement shall be granted by the manager of public works, except upon the following express conditions:

(1) That all costs incident to the work shall be borne solely by the permittee;

(2) That before any work is commenced, the permittee shall submit plans and specifications of the proposed work to the manager of public works, and the work shall not be commenced without the approval, in writing, by the manager of the plans and specifications; such approval shall be contingent upon the payment by the permittee to the city of a design checking fee, computed on the basis of the city's current charges for such service;

(3) That during the course of construction the city shall cause inspections of the work to be made to determine whether the work is being performed according to the approved plans and specifications, and that the quality of the work and material is acceptable. If the city determines that

the work is not being so performed, the manager shall order the work to cease until there is satisfactory evidence that the work conforms to the plans and specifications. The permittee shall pay to the city an inspection fee, computed on the basis of the city's current charges for such services;

(4) That upon completion of the work and approval and acceptance by the city, all right, title and interest in the same shall vest in the city;

(5) That the permittee shall indemnify, save and keep the city and its officers and employees harmless from any and all claims, damages, liability, losses, actions, suits or judgements which may be presented, sustained, brought or obtained against the city or any of its officers or employees because of or as a result of the work being performed by the permittee;

(6) That the work done shall be done only by a contractor licensed by the city to perform that particular type of work;

(7) That the permittee, in performance of the work, observe and comply with the provisions of the Charter, ordinances and rules and regulations of the city and state and federal laws which, in any manner, limit, control or apply thereto, and that all permits and licenses required in the prosecution of the work be obtained and paid by for the permittee;

(8) That the permittee, the permittee's contractors and subcontractors pay all sales and use taxes levied by the state and the city on any tangible personal property built into or incorporated into the work and within ten (10) months after such payment of the state tax is made, furnish to the city an

itemized, certified and acknowledged statement, including the names and addresses of the suppliers, the amounts of such taxes, and the dates of payment;

(9) That the permittee execute a bond, or other guarantee or indemnification, approved by the city attorney, conditioned that the permittee shall promptly make payments of all amounts lawfully due to all contractors, subcontractors and persons furnishing labor or materials or labor and materials used or performed in the prosecution of the work, and will indemnify the city to the extent of all payments in connection with performing the work;

(10) That the permittee shall at all reasonable hours allow right of entry to any city inspector or other authorized agent of the city to the work site, and allow such inspector or agent the right to conduct tests and evaluations as to the quality of the work performed and materials used and conformance with the approved design and specifications.

Secs. 49-174 - 49-190. Reserved.

A P P E N D I X E

SAMPLE REVOCABLE PERMIT OR LICENSE

Department of Public Works

A REVOCABLE PERMIT OR LICENSE, SUBJECT TO CERTAIN TERMS AND CONDITIONS. TO APPLICANT/LICENSEE ITS SUCCESSORS AND ASSIGNS TO ENCROACH INTO STREET RIGHT-OF-WAY AT (ADDRESS) WITH PLANTERS, STREET LIGHTS, IRRIGATION LINES, METER PEDESTALS, BENCHES AND TRASH RECEPTACLES.

BE IT ENACTED BY THE MANAGER OF THE DEPARTMENT OF PUBLIC WORKS OF THE CITY AND COUNTY OF DENVER:

Section 1.

That the City and County of Denver hereby grants (applicant / licensee), its successors and assigns a revocable permit or license to encroach with planters, street lights, irrigation lines, meter pedestals, benches and trash receptacles in the following described area(s): (legal description of encroachment area)

Section 2.

The Revocable Permit or license granted by this ordinance is expressly granted upon and subject to each and all of the following terms and conditions:

(a) All construction in, on or over the area of encroachment shall be accomplished by a contractor duly licensed by the City and County of Denver, in accordance with the Building Code of the City and County of Denver. Plans and specifications governing the con-

struction of said planters, street lights, irrigation lines, meter pedestals, benches and trash receptacles, shall be approved by the Manager of public Works and the Director of the Building Inspection Division prior to construction. Upon completion a reproducible copy of the exact location and dimensions of the encroachments shall be filed with the Manager of Public Works.

(b) The licensee shall pay all costs of construction and maintenance of said planters, pedestrian lights, irrigation lines, meter pedestals, benches, and trash receptacles and upon revocation of permit as provided herein or upon abandonment shall pay all costs of removing the said structures from the encroachment area and return the street(s) to its (their) original condition under the supervision of the City Engineer. Maintenance shall be in accordance with the attached standards.

(c) This revocable permit or license shall not operate or be construed to abridge, limit or restrict the City and County of Denver in exercising its right to make full use of (Street) as a public thoroughfare(s) nor shall it operate to restrict the utility companies in exercising their rights to construct, remove, operate and maintain their installations within the said street(s).

Any costs that are incurred relocating facilities for the utility companies during construction within the encroachment areas will have to be borne by the licensee.

(d) The licensee is to assume full responsibility for any and all damages incurred to facilities of the Water Department and/or drainage facilities for water and sewage of

the City and County of Denver due to activities authorized by the permit. Any and all replacement or repair of Water Department facilities of the Water Department and/or drainage facilities for water and sewage of the City and County of Denver attributed to the work shall be made by the Water Department and/or the City and County of Denver at the sole expense of the licensee.

(e) The sidewalk over the encroachment areas shall be capable of withstanding an HS-20 Loading in accordance with the latest AASHO Specifications. The installations within the said encroachment areas shall be so constructed that the paved sections of the street can be widened without requiring additional structural modifications.

The sidewalk shall be constructed so that it can be removed and replaced without affecting structures within the encroachment area.

(f) The licensee shall agree to indemnity and always save the City and County of Denver harmless from all costs, claims or damages arising out of the right and privileges granted by this permit.

(g) During the existence of said encroachment, the licensee or permittee, its successors and assigns, at its or their expense, and without cost to the City and County of Denver, shall procure and maintain a single limit comprehensive general liability insurance policy with a limit of not less than \$500,000. All coverages are to be arranged on the occurrence basis and include coverage for those hazards normally identified at X.C.U. during construction. The insurance coverage hereinabove enumerated

constitutes a minimum requirement and such enumeration shall in no way be deemed to limit or lessen the liability of the licensee or permittee, its successors or assigns, under the terms of this revocable license or permit; all of the insurance coverage required herein shall be written in form and by a company or companies approved by the Manager of public Works of the City and County of Denver and authorized to do business in the State of Colorado. A certified copy of all such insurance policies shall be filed with the said Manager of public Works, and each such policy shall contain a statement therein or endorsement thereon that it will not be cancelled or materially changed or altered without at least thirty days prior written notice, by registered mail, to the said Manager of Public Works at least thirty days prior to the termination of the terms; all such insurance policies shall be specifically endorsed to include all liability assumed by the licensee or permittee hereunder and shall name the City and County of Denver as an additional insured.

(h) The licensee shall also remove and replace any and all street paving, sidewalks and curb and gutter, both inside the area of encroachment and in the area of the streets adjoining thereto, that become broken, damaged or unsightly during the course of construction without cost to the City. In the future the licensee shall also remove, replace or repair any street paving, sidewalks and curb and gutter that become broken or damaged when in the opinion of the City Engineer the damage has been caused by the construction within the area of encroachment.

The work required to effect the said repairs shall be accomplished without cost to the City and under the supervision of the City Engineer.

(i) The City and County of Denver reserves the right to make an inspection of the said planters, street lights, irrigation lines, meter pedestals, benches and trash receptacles and facilities contained within the confines of this encroachment for which an annual fee of \$50.00 shall be assessed.

(j) In the event the licensee sells his interest in the property adjacent to the encroachment area, he/she shall assign all provisions of this permit to the new owner and the new owner shall be considered the licensee as long as he/she owns the property and shall be subject to all the terms and conditions of this permit including this one.

(k) The licensee shall maintain the planters, street lights, irrigation lines, meter pedestals, benches and trash receptacles in accordance with the maintenance standards which are attached to this document and incorporated herein.

(l) The City reserves the right to order repairs and maintenance of the improvements in the event the owner does not repair or maintain the improvements as specified above, and the costs of said repairs and maintenance shall be paid by the owner.

Section 3.

That the revocable permit or license hereby granted shall be revocable at any time that the Council of the City and County of Denver shall determine that the public convenience and necessity or the public health, safety or general welfare require such revocation, and the right to revoke the same is hereby expressly reserved to the City and County of Denver: provided however, at a reasonable time prior to Council action upon such revocation or proposed revo-

cation, opportunity shall be afforded to licensee or permittee, its successors and assigns, to be present at a hearing to be conducted by the Council upon such matters and there to present its or their views and opinions thereof and to present for consideration action or actions alternative to the revocation of such license or permit.

Section 4.

That this license or permit shall be of no force or effect until the following things have been done and performed:

(a) The licensee or permittee shall have filed with the Manager of Public Works a written acceptance of the terms and conditions of this ordinance together with a fee for filing with the Clerk and Recorder in and for the City and County of Denver: said acceptance shall be in substantially the following form:

Date: _____

We the undersigned do hereby accept all of the terms and conditions recited in Ordinance No. _____, Series of 19____.

Signed

By: _____
(Permittee or Licensee)

By: _____
(Name of Officer)

(b) The licensee or permittee shall have filed with the Manager of Public Works all insurance policies and certificates herein recited; and

(c) The Manager of Public Works shall have certified in writing that the foregoing requirements have been performed.

MAINTENANCE STANDARDS

Indicate which standards are to apply by circling the numeral to the left of the maintenance item.

0. General:

0.1 District/private improvements within the public right-of-way must be maintained by the District/adjacent property owner at no cost to the City.

1. Utilities:

1.1 The District/adjacent property owner shall be responsible for providing and paying for continuous water and electrical service to the various improvements.

2. Sprinkler System:

2.1 The District/adjacent property owner shall be responsible for start-up, shut-down, periodic checks and adjustments, and replacement of parts as necessary.

2.2 Irrigation system shall be properly checked and pressurized at spring start-up.

2.3 Irrigation system shall be monitored and adjusted as necessary during the season.

2.4 Irrigation system shall be properly shut down and winterized at the end of the season.

2.5 Sprinkler heads shall be properly maintained.

3. Lighting:

3.1 The District/adjacent property owner shall maintain lighting control devices, i.e., timers, photocells, etc.

4. Pedestrian Lights:

4.1 The District/adjacent property owner shall replace damaged or missing light poles or any part within 30 days following the damage.

4.2 The District/adjacent property owner shall replace a burned out bulb or lamp within 10 days of it becoming burned out.

4.3 The District/adjacent property owner shall perform any needed general maintenance work, i.e., cleaning, painting as needed to maintain a clean and neat appearance.

4.4 The adjacent property owner shall be responsible for providing continuous electrical service to the pedestrian lights in the adjacent public right-of-way.

5. Trees:

5.1 Any person who installs a tree shall guarantee the life of the tree for one (1) year and shall replace any tree that dies or becomes diseased during the one (1) year period.

5.2 The District/adjacent property owner shall water but not overwater any tree in the adjacent public right-of-way.

5.3 The District/adjacent property owner shall perform any needed maintenance of the tree space, including, but not limited to: cleaning, weeding, mulching, and replacement of grates or paving materials.

5.4 The District/adjacent property owner shall perform any needed general maintenance work on landscaped areas

and planter boxes installed in the public right-of-way.

5.5 The District/adjacent property owner shall perform maintenance work on trees installed in public space, including, but not limited to, pruning and spraying and, when necessary after the one (1) year period provided for above, the District/adjacent property owner shall replace any tree in public right-of-way.

5.6 When necessary, the District/adjacent property owner shall remove the grates, the previous paving material, or any other material installed in the tree space to perform necessary maintenance on the tree or the roots of the tree.

5.7 The District/adjacent property owner shall perform any emergency maintenance on a tree in the public right-of-way.

5.8 Trees or any other plant growth when permitted to grow upon public streets, or public right-of-way, shall be kept and maintained in such a manner as not to endanger, interfere, or otherwise conflict with requirements of safe public use thereon.

5.9 Trees or any other plant growth shall be sprayed as necessary to prevent disease or insect damage.

5.10 Trees or any other plant growth shall be fertilized as necessary to promote healthy growth.

5.11 Lighting controls i.e., timers, photocells, etc., shall be maintained in good operating condition.

6. Shrubs:

- 6.1** The District/adjacent property owner shall perform maintenance work on shrubs installed in public space, including, but not limited to cleaning, weeding, mulching, pruning and spraying and, when necessary replace any shrub in public right-of-way.
- 6.2** The District/adjacent property owner shall water but not overwater any shrub within the District/adjacent public right-of-way.

7. Sod and Ground Covers:

- 7.1** The District/adjacent property owner shall perform maintenance work on sod or ground covers installed in the public right-of-way, including, but not limited to: cleaning, mowing, spraying, fertilizing, aerating, dethatching, watering.

8. Sidewalk Paving:

- 8.1** The District/adjacent property owner shall promptly repair or replace cracks and broken or missing sidewalk paving if such crack or broken pavement creates a hazard to public safety.
- 8.2** Sidewalks shall be kept clear of deleterious materials and all walks or plazas shall be kept clear and trash picked up as needed.
- 8.3** Sidewalks shall be kept clear of snow accumulation within 24 hours after snowfall ends.
- 8.4** Concrete joints shall be properly maintained and caulking replaced as needed.

9. Trash Removal:

- 9.1** The District/adjacent property owner shall be responsible for trash pick-up and removal as needed.

10. Metals:

- 10.1** The District/adjacent property owner shall be responsible for maintaining all metal-fabricated street furniture elements, i.e., bike racks, benches, bollards, handrails, railings, “monuments,” pavilions, directories, etc., in good repair and condition. Painted surfaces shall be repainted if scratched, chipped, or painted with graffiti. Broken parts shall be replaced or repaired within 30 days of being damaged.

11. Wood:

- 11.1** The District/adjacent property owner shall be responsible for maintaining all wooden elements. Broken or otherwise damaged elements or parts shall be repaired or replaced within 30 days of being damaged. Wooden benches shall be properly oiled and maintained.

12. Brick and Stone:

- 12.1** The District/adjacent property owner shall be responsible for maintaining brick or stone planter walls in good condition. Missing units or stones shall be replaced. Mortar and caulking shall be repointed/or replaced as needed.
- 12.2** Planter walls shall be kept clean.

A P P E N D I X F

LOCAL MAINTENANCE DISTRICTS REVISED MUNICIPAL CODE

A2.29 General powers to create.

The City and County may create local maintenance districts, conferring special benefits upon real property within such districts and general benefits to the City and County at large under provisions as the city and County may be ordinance provide, for the continuing care, operation, security, repair, maintenance and replacement of pedestrian and/or transit malls. As used in this Article of the Charter, pedestrian and/or transit malls shall mean a public right-of-way and/or public rights-of-way from which general vehicular traffic shall be excluded except that public transportation vehicles, emergency vehicles and other vehicles by special permit may be allowed, and which shall have been specially constructed with amenities to enhance a primarily pedestrian environment. Any such local maintenance district shall have a Board of five members (hereinafter called the "Board"); at least three members of said Board shall be owners of real property within such district or shall be representative of owners of such property or officers of corporations which are owners of such property; and one member shall be the Manager of Public works. The four members of the Board who will serve with the Manager of Public Works shall be appointed by the Mayor at the time of the initiation of the proposed district for a term of three years and may be

removed only for cause upon written charges and after a public hearing conducted by the Manager of Public Works. Activities involving the continuing care, operation, security, repair, maintenance and replacement of pedestrian and/or transit malls utilizing district assessments in whole or in part shall be subject to the prior review and approval by the Manager. Subject to prior written approval by the Manager, the Board may, utilizing district assessments, undertake the activities delineated above either directly or through contractor(s) selected by the Board. The administration and/or contracting of such activities shall not be subject to any other provisions of the Charter, ordinances, or regulations of the City

(Amended November 3, 1992)

A2.30 How initiated.

In all cases when the costs of the continuing care, operation, security, repair, maintenance and replacement of pedestrian and/or transit malls are to be assessed wholly or in part upon the real property, exclusive of improvements thereon, benefited, the district therefor shall be initiated and proposed by filing a petition therefor with the Department of Public Works; or, in the alternative, the Manager of Public Works (hereinafter called the "Manager") without receiving a petition therefor may in his official capacity initiate and propose the establishment of such a district. Each petition shall include an accurate description of the boundaries of the proposed district; the zoning; the assessed value for the current year of the real property, exclusive of improvements thereon; the total area of the proposed district; the area, location and assessed value for the current year of the real

property, exclusive of improvements thereon, of each signer of the petition sufficient to establish that the petitioners own real property, exclusive of improvements thereon, representing thirty-five or more per cent of the assessed valuation of the real property, exclusive of improvements thereon, of the proposed district; a general description of the pedestrian and/or transit mall; and the manner and estimated cost of the continuing care, operation, security, repair, maintenance and replacement of said pedestrian and/or transit mall. All signatures on petitions shall be subscribed and acknowledged in the manner provided by law for the acknowledgment of deeds of conveyance of real estate; provided, however, that the signature of any owner or owners may be attached to a petition by agents duly authorized by a power of attorney accompanying the petition. No petitioner, his heirs or assigns, shall be permitted to withdraw from a petition after the Manager has advertised such local maintenance district for remonstrances. When a petition signed by the owners of real property representing thirty-five or more per cent of the assessed valuation of the real property, exclusive of improvements thereon, within the proposed district has been filed or when a proposal by the Manager for the establishment of such a district has been initiated and proposed, the Manager shall advertise such proposed local maintenance district for remonstrances.

(Amended November 7, 1978)

A2.31 Manner of notice.

In all cases when the costs of the continuing care, operation, security, repair, maintenance and replacement of pedestrian and/or

transit malls are to be assessed wholly or in part upon the property benefited, the Manager shall by advertisement for three publication days, exclusive of Sundays and holidays, in the official newspaper, give notice to the owners of the property benefited and to all persons interested generally, without naming such owners or persons. Said notice shall state the exterior boundaries of the property to be so assessed or of the proposed district; a description of the property which would be benefited thereby; a proposed method of assessment and the manner of payment thereof; and the date, place and time for hearing written remonstrances to the proposed district which shall be not less than twenty days after the last publication of the notice.

(Amended November 7, 1978)

A2.32 Hearing - Remonstrance and order.

On the day and at the time and place specified in the notice hereinabove set forth, the Manager or his authorized representative, shall conduct a hearing for the purpose of considering the desirability of and the need for the continuing care, operation, security, repair, maintenance and replacement of the pedestrian and/or transit mall. If for any reason the hearing is postponed and not held until a later hour or date, and the Manager is hereby authorized to postpone any hearing to a fixed later hour and date, written remonstrances to the proposed district shall be accepted to the opening of the postponed session of the hearing; otherwise, such written remonstrances must be filed prior to the date and hour of the original hearing. All written remonstrances to the proposed district shall be subscribed and acknowledged in the same manner required for petitions. No person who has signed a petition for the

proposed district shall be permitted to sign a remonstrance unless such person has withdrawn from such petition as herein provided. If a duly executed written remonstrance is timely filed by the owners representing fifty or more per cent of the assessed valuation of real property, exclusive of improvements thereon, within the proposed district, said proposed district, whether it be a proposed district initiated and proposed by the filing of a petition therefor or a proposed district initiated and proposed by the Manager without receiving a petition therefor, shall not be ordered. After the hearing and subject to the foregoing limitations, the Manager shall enter an order either approving the proposed district or disapproving the proposed district.

(Amended November 7, 1978)

A2.33 Maintenance costs.

At the time of the initiation of the proposed district, the Manager shall estimate the total cost of the continuing care, operation, security, repair, maintenance and replacement of the pedestrian and/or transit mall in the proposed district, and a detailed estimate for each maintenance element included in said district for the first full year of the existence of the district. *(Amended November 7, 1978)*

A2.34 Creating ordinance required.

Whenever the Manager approves a local maintenance district after the hearing as hereinabove set forth, he shall cause to be prepared and submitted to Council an ordinance authorizing the creation of the district for the continuing care, operation, security, repair, maintenance and replacement of the pedestrian and/or transit mall proposed. The creation ordinance shall apportion the relative benefits to the real properties, exclusive of improve-

ments thereon, within the local maintenance district, which shall remain the same during the entire existence of the district except as hereinafter provided and which apportionment shall not be disturbed by any reviewing court except upon a finding as a matter of law that the determination is manifestly disproportionate to the assessments imposed upon other real property, exclusive of improvements thereon, in the district. Such ordinance shall be in the form recommended by the Manager by endorsement thereon and shall not be subject to amendment by Council.

The Board or the Manager may, from time to time, order a benefit study of the district; or, in the alternative, a petition requesting that such a study be made, signed by the owners of real property representing thirty-five or more per cent of the assessed valuation of the real property, exclusive of improvements thereon, of the district, may be filed with the Department of Public Works. Each petition so initiated by property owners shall include the current assessed value of the said real property, exclusive of improvements thereon, of each signer of the petition sufficient to establish that the petitioners own real property representing thirty-five or more per cent of the assessed valuation of the real property, exclusive of improvements thereon, of the district and a justification for the request of a benefit study. The cost of any benefit study shall be an assessable cost.

The Manager shall determine, after considering the benefit study, if modifications or adjustments of the relative benefits established by ordinance are required; and if the Manager determines that modifications are required, he shall cause to be prepared and submitted to Council an ordinance modifying

the relative benefits to the real properties, exclusive of improvements thereon, within the local maintenance district. Such ordinance shall be in the form recommended by the Manager, with the prior advice of the Board having been obtained, by the Manager's endorsement thereon and shall not be subject to amendment by Council.

The respective proceedings by the Manager may be modified, confirmed or rescinded by the Manager at any time prior to the passage of the ordinance authorizing the creation of the district for the continuing care, operation, security, repair, maintenance and replacement of the pedestrian and/or transit mall. The finding of Council by ordinance that any of the above activities were duly ordered after notice duly given, or that a petition or remonstrance was or was not filed or was or was not duly subscribed and acknowledged as herein required, shall be conclusive in every court or other tribunal.

(Amended November 7, 1978)

A2.35 Assessment of costs -
Notice of assessments -
Written complaints.

In all cases when the costs of the continuing care, operation, security, repair, maintenance and replacement of pedestrian and/or transit malls are to be assessed wholly or in part upon the real property exclusive of improvements thereon, to be benefited, the costs shall be assessed on said real property, exclusive of improvements thereon, in proportion to the benefits secured. The Board shall have the right, power, authority, duty and obligation to determine annually the total or proportionate annual costs to be assessed for the continuing care, operation, security, repair, maintenance and replacement of the pedestrian

and/or transit mall which shall be proportionately assessed annually against the real properties, exclusive of improvements thereon, in accordance with the creating ordinance. Said annual determinations shall be made after the Board's receipt each year of an estimated total annual costs for the continuing care, operation, security, repair, maintenance and replacement of the pedestrian and/or transit mall submitted by the Manager. Upon said annual determination, the Manager, for three publication days, exclusive of Sundays and holidays, shall publish in the official newspaper a notice to the owners of the real properties to be assessed and to all persons interested generally, without naming such owners or persons, specifying the annual costs and a proposed assessment thereof on the properties benefited; and a statement that any written complaints and objections to the proposed assessment which are filed with the Manager at any time within twenty days after the last publication of the notice will be heard and determined by Council, sitting as a Board of Equalization, at its first regular meeting thereafter, or at a postponement thereof, before the passage of any ordinance assessing said costs.

(Amended November 7, 1978)

A2.36 Hearing by council -
Clerk's certification.

After the period specified in such notice, Council sitting as a Board of Equalization, at its next regular meeting, or an adjournment thereof, shall hear and determine all written complaints and objections filed with the Manager and may confirm the assessments proposed or make any modifications which may seem equitable and just. After the consideration of all objections to the assessments shall be made by Council, it shall certify any such modifications to the Man-

ager who shall prepare an assessing ordinance in accordance therewith and transmit the same to Council. The assessing ordinance shall assess the annual costs of the continuing care, operation, security, repair, maintenance and replacement of the pedestrian and/or transit mall against the real properties, exclusive of improvements thereon, as determined, and the City Clerk shall thereupon deliver to the Manager of Revenue and the Auditor a certified copy of the ordinance.

(Amended November 7, 1978)

A2.37 Manager of revenue to
prepare assessment roll.

The Manager of Revenue shall from said assessing ordinance prepare a local assessment roll. On request for the amount of the taxes against any property the Manager of Revenue shall include in his statement special assessments for a local maintenance district. No error, failure, neglect or default on the part of the Manager of Revenue in complying with the provisions of this section shall invalidate any tax or assessment or affect the lien thereof.

(Amended November 7, 1978)

A2.38 Effect of judicial
invalidation of district.

From the date of the publication of the assessing ordinance all assessments for a local maintenance district made pursuant hereto shall be a lien in the several amounts assessed against each lot or tract of land, and such lien shall have the priority of the lien for local public improvements. As to any subsequent subdivision of any real estate assessed for a local maintenance district pursuant hereto, the assessments in each case shall be a lien upon all the subdivision in proportion to their respective areas. No delays, mistakes, errors, defects or irregularities in any act

or proceeding authorized herein shall prejudice or invalidate any assessment for a local maintenance district, the same shall be remedied by subsequent or amended acts or proceedings as the case may require, and when so remedied the same shall take effect as of the date of the original act or proceeding. If in any court of competent jurisdiction any assessment for a local maintenance district is set aside for irregularity in the proceedings, then Council, upon recommendation and notice as required in making of an original assessment, may make a new assessment in accordance with the provisions herein.

(Amended November 7, 1978)

A2.39 Assessments - When due.

Without demand, all assessments for a local maintenance district shall be due and payable on the first day of January of the year next following the year in which the assessing ordinance became effective, and said assessment shall become delinquent if not paid by the last day of February of the year next following the year in which the assessing ordinance became effective.

(Amended November 7, 1978)

A2.40 Penalty on delinquent assessment.

If an assessment for a local maintenance district is not paid by the last day of February of the year next following the year in which the assessing ordinance became effective, penalty interest on the amount of the assessment shall accrue at the rate of one per cent per month or fraction of a month from the first day of March of said year next following the year in which the assessing ordinance became effective until the day of sale as hereinafter provided.

(Amended November 7, 1978)

A2.41 Sale of property.

The Manager of Revenue shall receive payments of all assessments for a local maintenance district against real estate appearing upon his records, and in case of default in the payment of such an assessment for the period of five months after the same becomes delinquent, shall advertise and sell any and all real estate concerning which such default is suffered; and said sales and advertisements shall be made at the same time or times, in the same manner and under all the same conditions and penalties and with the same effect as are provided by general laws for the sales of real estate in default of payment of general taxes.

(Amended November 7, 1978)

A2.42 Purchase by the city and sale of certificates.

At any sale by the Manager of Revenue of any real estate in the City and County for the purpose of paying any special assessments for a local maintenance district, said Manager may purchase any such real estate without paying for the same in cash, and shall receive certificates of purchase in the name of the City and County, and such certificates shall be received and credited at their face value, with all interest and penalties accrued, to the Manager of Revenue on account of the assessments for a local maintenance district in pursuance of which the same was made. Said certificates may thereafter be sold by the Manager of Revenue at their face value, with all interest and penalties accrued, and by him assigned in the name of the City and County, and the proceeds credited to the fund created by ordinance for the payment of such assessments. Such assignments shall be made without recourse upon the City and County in any event, and the sale or the assignment of the cer-

tificates shall operate as an assignment of the lien in favor of the City and County and to the holders of such certificates, as is provided by law in the case of sales of real estate for default in payment of general taxes.

(Amended November 7, 1978)

A2.43 Accountability of collections.

All collections made by the Manager of Revenue in any calendar month upon any such assessment for a local maintenance district shall be accounted for to the Auditor on or before the tenth day of the next succeeding calendar month.

(Amended November 7, 1978)

A2.44 Surplus money in district.

When the existence of a local maintenance district is terminated and any money remains to the credit of said district, it shall be transferred to the general fund of the City and County.

(Amended November 7, 1978)

A2.45 Limitations of actions.

No action or proceeding, at law or in equity, to review any acts or proceedings, or to question the validity or enjoin the performance of any act, or the levy or collection of any assessment for a local maintenance district authorized herein, or for any other relief against any acts or proceedings done or had pursuant hereto or under the provisions of the Charter of the City and County of Denver, with reference hereto, whether based upon illegalities, irregularities or jurisdictional defects, shall be maintained unless commenced within ninety days after the performance of the act or the passage of the resolution or ordinance complained of or else be thereafter perpetually barred.

(Amended November 7, 1978)

A P P E N D I X G

Article II.

PARKWAYS AND BOULEVARDS

Sec. 49-16. Designation.

The following are designated as parkways and boulevards:

- (1) East Alameda Avenue-Steele Street to Quebec Street;
- (2) Berkeley Cutoff-West 46th Avenue at Yates Street to Sheridan Boulevard;
- (3) Bonnie Brae Boulevard-University Boulevard at Exposition to Mississippi Avenue at Steele;
- (4) Buchtel Boulevard-Clarkson Street to Colorado Boulevard;
- (5) City Park Esplanade-Colfax to East 17th Avenue;
- (6) Cherry Creek Drive (north and south sides)- University Boulevard to Quebec Street;
- (7) Clermont Street Parkway-East 3rd Avenue to East 6th Avenue;
- (9) Downing Street Parkway-East 3rd Avenue to East Bayaud Avenue;
- (10) Federal Boulevard-South city limits to 25th Avenue; 26th Avenue to north city limits;
- (11) Forest Street Parkway-East 17th Avenue to Montview Boulevard;
- (12) Hale Parkway-East 12th Avenue at Colorado Boulevard to East 8th Avenue at Grape Street;
- (13) South Irving Street Parkway-West Evans Avenue to West Jewell Avenue;
- (14) Josephine Street-Cherry Creek to 2nd Avenue;
- (15) Monaco Street Parkway-East 40th Avenue to Quincy Avenue except that portion of the west side of Monaco Street Parkway between the Highline Canal and Hampden Avenue in Arapahoe County;
- (16) South Marion Street Parkway-East Bayaud Avenue at Downing, to Marion Street to East Virginia;
- (17) Montview Boulevard-Colorado Boulevard to Syracuse Street;
- (18) Park Avenue-East Colfax to East 20th Avenue
- (19) Richthofen Place Parkway-Monaco Parkway to Oneida Street;
- (20) Speer Boulevard (north and south to Cherry Creek) -Federal Boulevard to Downing Street;
- (21) University Boulevard-South city limits to Yale Avenue; Iowa Avenue to 6th Avenue;
- (22) Williams, 3rd Avenue Parkways, and Country Club Island-Williams Street from East 8th Avenue to East 4th Avenue; Fourth Avenue from Williams Street to Gilpin Street from East 4th Avenue to East 3rd Avenue; 3rd Avenue from Gilpin Street to Downing Street; Downing Street from East 3rd Avenue to Speer Boulevard; Franklin Street; 1st to 4th Avenue; Gilpin Street, 1st to 4th Avenue; High Street, 1st to 4th Avenue;
- (23) East 1st Avenue-Downing Street to University Boulevard;
- (24) East 3rd Avenue Parkway-Colorado Boulevard to Clermont Street;
- (25) East 6th Avenue Parkway-Colorado Boulevard to Clermont Street;
- (26) East 7th Avenue Parkway-Williams Street to Colorado Boulevard;
- (27) West 14th Avenue Parkway-Bannock Street to Broadway;
- (28) East 17th Avenue Parkway-Colorado Boulevard to Monaco Parkway;
- (29) East 26th Avenue Parkway-York Street to Colorado Boulevard;
- (30) East 32nd Avenue Parkway-Elizabeth Street to Quebec Street;
- (31) West 46th Avenue-Grove Street to Sheridan Boulevard.

Sec. 49-17. Setback regulations

(a) Parkway and boulevards named in this article shall be subject to such setback regulation of structures as the manager of parks and recreation may file with the building and zoning departments; provided, however, that such setback regulations shall not apply to police stations and provided further that where existing development of a particular block contradicts the intent of such setback regulations, permits may be approved consistent with the setback of existing structures on that block.

(b) The manager of parks and recreation may waive the setback requirements for fences and walls in excess of four (4) feet in height where it is found that the proposed fence or wall would be located on a parkway or boulevard where the impact of traffic and noise from said parkway or boulevard interferes with the reasonable use and enjoyment of the subject property and the fence or wall will not detract from the boulevard or parkway setting or the use of adjacent property. No waiver may be granted unless the proposed fence or wall has been approved by the department of zoning administration.

Sec. 49-18. Building to front on parkway or boulevard.

Every building shall either face the parkway or boulevard or one of two (2) fronts shall face the parkway or boulevard; provided, however, where existing development or municipally approved platting contradicts the intent of this provision permits may be approved consistent with such existing development or platting.



WELLINGTON E. WEBB
Mayor

CITY AND COUNTY OF DENVER

PLANNING AND COMMUNITY
DEVELOPMENT OFFICE

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MEMORANDUM

TO: Senior Staff of:
Department of Public Works
Department of Parks and Recreation
The Office of Planning, Zoning and Community Development

FROM: Bruce D. Alexander, Manager of Parks and Recreation
Jennifer Moulton, Director of Planning, Zoning and Community Development
Michael Musgrave, Manager of Public Works

DATE: December 30, 1993

SUBJECT: DENVER STREETSCAPE DESIGN MANUAL ADOPTION

With this memorandum we direct our staffs to utilize the "Streetscape Design Manual", City and County of Denver, as a guideline/standard to be followed by anyone executing, guiding or reviewing streetscape projects within the public right-of-way. A number of key staff people in each department have participated in the development and review of this document.

The purpose of the manual is to make the City's guidelines for the design of streetscapes clear and consistent. The manual brings together all of the City's applicable guidelines, standards and resource references into one document. We believe this manual to be as complete and thorough as any produced by the City. Inevitably there will be some minor discrepancies and possibly minor variances with current practices and policies. This should in no way devalue the importance or use of this document.

The authority of the manual derives directly from the "1989 Denver Comprehensive Plan". The manual fulfills the Denver Comprehensive Plan Policy UD-A-25 which states "Develop streetscape design guidelines that reflect Denver's historic urban design legacy of tree lawns and street trees, and the conditions of different types of streets and business areas. Coordinate with requirements for Parkways." The manual also fulfills the Comprehensive Plan's Core Goal #2 "Beautify the City and Preserve it's History."

MEMORANDUM**12-30-93****PAGE TWO**

The Denver Planning Board at a regular meeting adopted the Streetscape Design Manual, September 16, 1992, as a technical guideline of the "1989 Denver Comprehensive Plan".

cc: B.J. Brooks, Deputy Manager, Parks, Department of Parks and Recreation
Dick Farley, Deputy Director of Urban Design
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John Stamm, City Engineer, Public Works
Mark Upshaw, Urban Designer, Parks and Recreation and the Office of Planning, Zoning and Community Development

A C K N O W L E D G E M E N T S

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DENVER PUBLIC LIBRARY

Special thanks to the Western History
Department for Historic Photographs

PHOTOGRAPHY

Gregg Brown, Mark Leese,
Paul Foster, Mark Upshaw

COVER PHOTO

Sherman Avenue on a Stormy Day, 1905
L.C. McClure
*Courtesy Denver Public Library,
Western History Department*

TREE FORM GRAPHICS

Pages 11-24
Courtesy Schichtel's Nursery

D E D I C A T I O N

*To
those of this city who now,
in the past, and for the future,
have the wisdom, sustaining energy
and commitment to care for
our urban landscape.*