City of Casper

Design Standards for Commercial/Downtown Streetscape and Parks

September 2005

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1 INTRODUCTION

Intent of the Standards

These standards outline a framework of basic requirements that will help to visually unify the public areas of the City of Casper. Within this framework, there is room for variety and flexibility, while maintaining a cohesive character.

This document is organized into six sections:

1. *Introduction*
2. *Citywide Streetscape Standards*
   The streetscape standards are intended to help create a balanced, ordered street with regular and consistent placement of street elements.
3. *Parking Lot Standards*
   The parking lot standards describe how to buffer parking areas.
4. *Bikeway Standards*
   The bikeway standards are intended to create safe and aesthetic bikeways for cyclists.
5. *Park Standards*
   The park standards provide an overview of the types of parks in Casper and the elements that should be considered in the design of new parks.
6. *Glossary*
   The glossary provides definitions for streetscape terminology.

Streetscape

Streetscape can begin to strengthen the overall character of place, but the width of streets and walks and the character of new and existing buildings are just as important in making successful and active streets.

The key streetscape elements should be implemented with new construction to help to unify the street environment.

Second Street looking west 1920
source: www.caspercollege.edu/library

As outlined in the City of Casper Public Works Design Standards, designs based on the design standards are intended to produce improvements that:

- Achieve a high level of safety.
- Enhance the appearance of the City with attractive landscaping and other decorative amenities.
- Are durable and will last through their design life with minimal repair.
- Are easily maintained.
- Function efficiently.
- Provide uniformity for construction of infrastructure promoting familiarity and understanding by contractors, City personnel and the general public.
- Are economical to construct.
- Are economical to maintain.
- Facilitate efforts for review and approval of plans and specifications on an equal basis.

Streetscape Zones

The streetscape standards encompass the area from the back of the curb to the edge of right-of-way or the face of buildings that are along the street. This area is broken into a number of zones that all serve a purpose in the pedestrian environment.

Building Zone

The building zone is the area directly adjacent to the edge of the right of way. This zone may include planters or displays by business owners or outdoor café space. To accommodate doorways and outdoor café space, this zone needs to be a minimum of 5' wide.

Walk Zone

The walk zone is the free and clear area of the sidewalk where pedestrians walk adjacent to the street. This zone should be a minimum of 5' wide and be continuous along the length of the street. If minimum widths for amenity and building zones cannot be met, the minimum walk zone shall be 8' wide.

Amenity Zone

The amenity zone is located from the back of curb to a minimum of 4' from the curb. This zone may include street trees, grates, benches, trash receptacles, ash urns, public art, special paving, pedestrian and street lights, and regulatory signage. Along neighborhood streets, this area is usually turf with street trees. In downtown or commercial areas, it is usually paved with concrete or brick pavers.

Curb Zone

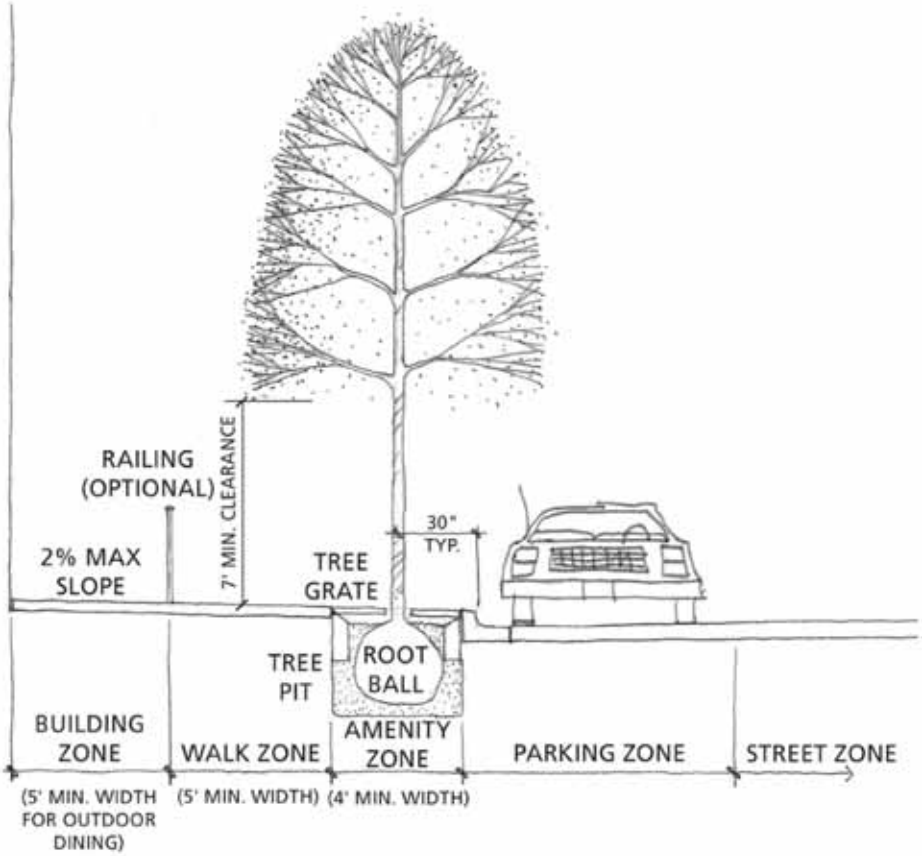
This area is directly adjacent to the curb and is used by pedestrians to access their vehicles. This zone is generally 12" to 18" in width and can overlap the amenity zone. This area needs to accommodate space for car door swings in parallel parking areas, or car overhang in angled parking areas.

Parking Zone

The parking zone is adjacent to the traffic lanes and can be either parallel or angled parking, depending on desired walk width and number of traffic lanes.

Street Zone

The street zone contains the traffic lanes that allow people to drive in an efficient manner. The traffic lanes must be wide enough to accommodate projected traffic levels on each street.



2 STREETSCAPE STANDARDS

City Streetscape Standards and Elements

A. Walks and Paving

Walk surfaces are an important consideration when developing citywide streetscape standards. The materials need to be durable, safe to walk on, and provide an overall character and quality level for the area. Casper currently has a number of paving materials, including concrete, brick, interlocking concrete unit pavers, and a variety of other stone and brick products, particularly in front of specific retail establishments.

concrete walk surfaces with scoring

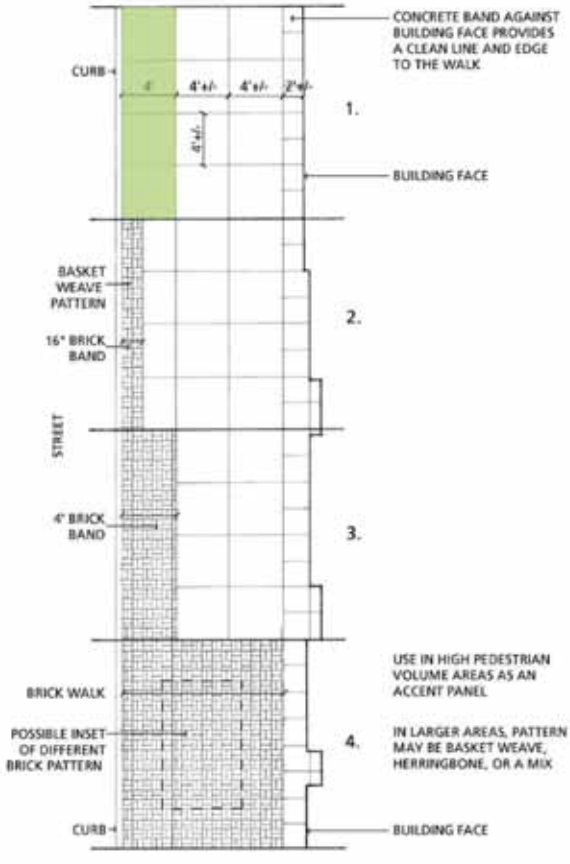
1. Concrete Paving

Materials and Finish

Standard: Concrete walk surfaces shall be standard gray concrete with medium broom finish; finish shall be perpendicular to the length of the walk. Concrete shall be a minimum of 4" thick for pedestrian areas and 6" thick where vehicles will drive over the surface (alleys and drives). Maximum cross slope on walkways shall not exceed 2%.

Scoring and Pattern

Refer to City of Casper Standard Specifications for Public Works Construction and Infrastructure Improvements.



sidewalk paving options

2. Brick Paving

Materials

Standard: Brick pavers used in the downtown area shall be a solid clay brick paver, able to withstand the harsh climate of Casper. Paver areas shall be earth-tone colors, matching the Rails to Trails corridor in the Downtown area, with colors distributed uniformly throughout the paved area. Paving pattern shall be either herringbone in large areas or basket weave where the pavers are in a narrow band behind the curb. All bricks shall be dry set, with sand swept joints. Sand shall be clean, sharp sand, meeting ASTM C33. No mortar or grout joints are permitted.

Due to normal variations in brick colors, the City shall approve a representative sample of the brick materials to be used prior to delivery to the job site. Submittal shall include a minimum of six (6) bricks of each color proposed for consideration.

Setting Methods

Standard: There are two acceptable setting methods for brick pavers:

i. Slurry base
Slurry setting bed for pavers shall be 4" depth control density backfill over 4" depth base course. A maximum of 1" sand shall be used as a leveling course over the slurry mix. Sand sweep all joints with clean, sharp sand.

ii. Concrete base
Concrete set pavers shall be 4" depth Grade W base course, with a 4" depth concrete setting bed with a 1" sand leveling course. Sand sweep all joints with clean, sharp sand.

3. Special Paving

The use of special paving, particularly around building entries adds to the texture and character of a downtown street. The embellishment of building entries should be encouraged. The cost of such treatments shall be borne by the individual establishments, if they desire to add this type of material.

Standard: Acceptable materials for this application are brick, stone (flagstone or granite), colored concrete or patterned concrete. The materials should be durable and complement the improvements to the streetscape environment without being overstated, garish, or dangerous to pedestrians. Surface texture and smoothness must comply with ADA standards.

specialty paving in amenity strip

Colored Concrete

In areas where colored concrete is desired, the color shall match the general color palette of the brick pavers listed above. Final color and placement shall be approved by the City of Casper Engineering Division.

Patterned Concrete

In areas where patterned concrete is desired, the pattern shall be a square or rectangular pattern mimicking stone or brick paving units. Random stone patterns, cobble, fishscale or boardwalk patterns are not permitted within the right of way. Maximum variation in surface texture is 1/8".

flagstone pavers

Stone

Stone can add another level of quality to the streetscape environment. Stone shall be red or buff flagstone (sandstone) that will withstand the Casper environment. Stone accents may also be granite with a flame finish to avoid creating a slippery surface. Stone materials and color to be approved by Director of City of Casper Public Services prior to installation.

bulb out treatment at intersections

B. Intersections

1. Bulb-out/Neckdowns

Bulb-outs and neckdowns are used to shorten the pedestrian crossing distance at intersections and mid block crossings. Removing parking near the intersection or widening the walk surface are two ways to accomplish this goal. Bulb-outs can add to street aesthetics by including site furnishings, signage, plantings and lighting at the widened area near the intersection. While bulb-outs are advantageous from a pedestrian standpoint, they must also consider drainage and street cross-slope issues in their design.

mid-block bulb-out

Standard: Bulb-outs and neckdowns should be incorporated into the streetscape wherever possible. Location and final design of bulb outs shall be approved by Director of City of Casper Public Services Department.

2. Crosswalks

Signalized Intersections

Standard: Intersection crosswalks shall be 8' wide, and be constructed of 8" depth colored concrete.

Specification: (Center and Second Streets in the downtown area) Colored concrete mix shall be Solomon Colors, No. 492 Maroon at the rate of 25 lbs. per one (1) cubic yard of concrete. Colored concrete where required shall match previous standard or be Solomon Colors, No. 775 Mohawk Orange at the rate of 25 lbs. per one (1) cubic yard as approved by City of Casper Public Services Director. Cross walks shall be scored in a 4' square grid pattern, with alternating tine finish to form a "checkerboard" pattern. Refer to City of Casper Design Standards for Public Works Construction and Infrastructure Improvements.

existing colored concrete crosswalk in Casper

Mid-block

Mid-block crosswalks allow pedestrians to more easily cross the street between intersections. These crossings are not signalized.

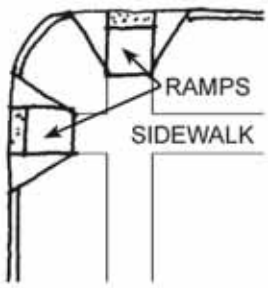
Standard: Where mid block crossings are allowed by the Director of City of Casper Public Services, they should match the materials of signalized intersection crosswalks.

3. Handicap Ramps/ADA Requirements

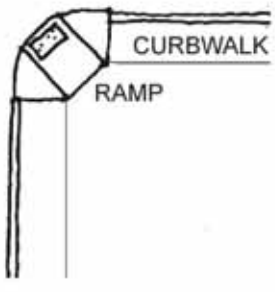
Standard: Handicap ramps shall be provided at each intersection or mid-block crossing. The ramp shall be a minimum of 36-inches wide, with sloped sides. Maximum ramp slope is 8.3 percent. The ramp material shall be concrete paving with a band of truncated domes to match the ramp width and 2 feet long at the bottom of the ramp. The truncated domes material shall be as per City ADA Ramp Detectable Warning Material Specification.

Commercial Areas

Where new handicap ramps are to be placed, the handicap ramp color shall match the crosswalk color, with a matching color truncated dome detectable warning strip at the bottom of the



ADA ramps at sidewalk intersections (preferred)



ADA ramps at curbwalk intersections (must meet 48" clearance in cross walk zone)

ramp per City of Casper Design Standards for Public Works Construction and Infrastructure Improvements.

All new ADA ramps shall have detectable warning system materials installed. Locate mats in accordance with Federal regulations. Install mats in accordance with manufacturer's recommendation.

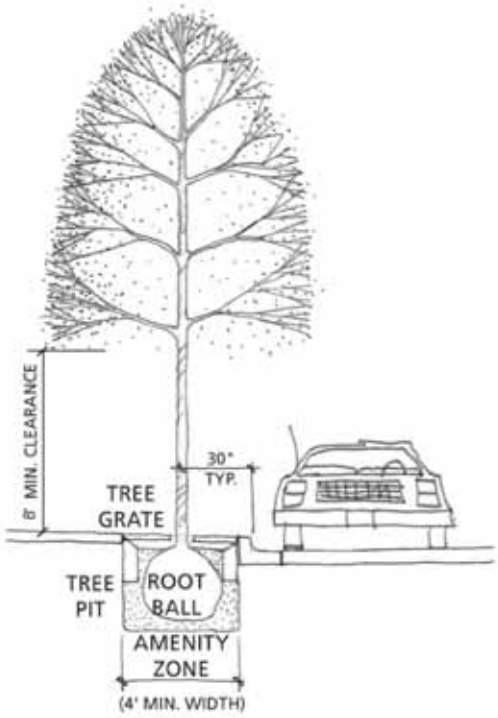
concrete paving corner ramps

Arterial and Downtown Streets

All new Arterial Streets shall have colored ADA Ramps. The ramp color shall be as specified elsewhere in these design specifications. Detectable Warning Mat with truncated domes shall be installed on top of the colored ADA Ramps. The location of the mat shall be in accordance with federal regulations and the installation shall meet the manufacturer's recommendations.

Collector and Residential Streets

All new residential/collector street intersections shall be equipped with ADA ramps. ADA ramps for these intersections need not have colored concrete. Detectable Warning Mat with truncated domes shall be installed on top of the ADA Ramps. The location of the mat shall be in accordance with federal regulations and the installation shall meet the manufacturer's recommendations.



tree types and details

C. Plantings

Plantings enhance street quality by providing shade, texture and seasonal color. Plantings also help to soften the often hard-edged urban landscape, usually dominated by buildings and streets. Where the area between the back of curb and the right of way is less than 8', street trees should not be permitted in the amenity zone due to the limited space for the tree canopy.

A permit is required from the City prior to planting trees in the right of way. Trees planted in the downtown area require coordination with the City of Casper Parks Division and Downtown Development Authority.

1. Planting Conditions

The average life of an urban street tree is approximately 7 years. Difficult growing conditions, compacted soils, lack of nutrients, vandalism, and a limited root zone all factor into whether or not the tree will survive for a long period of time. In the past, street tree growth was not very well understood, and trees were routinely placed in small tree pits, covered by a grate, and forgotten.

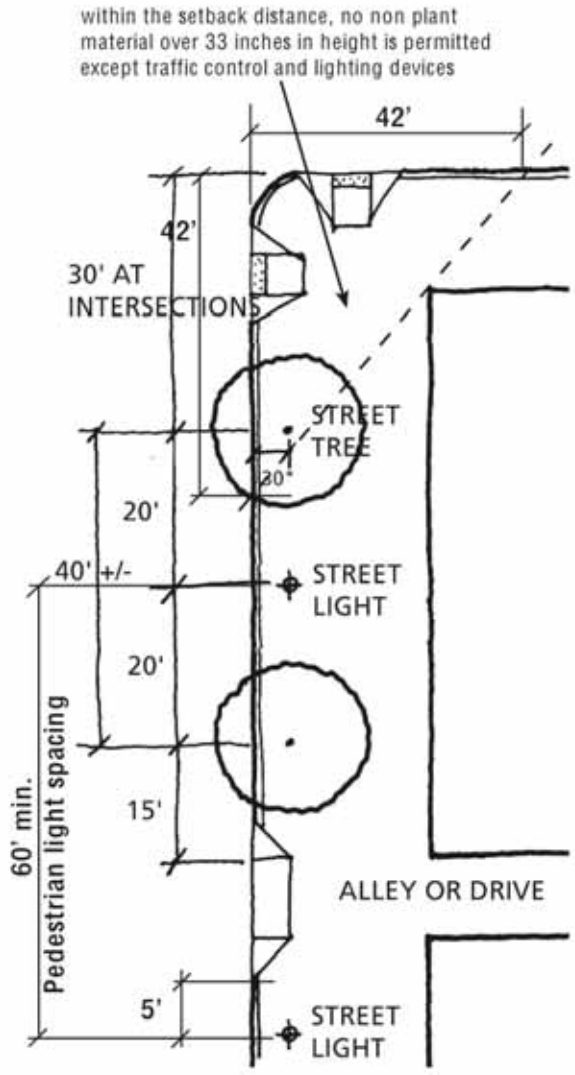
New research has enabled a better understanding of the requirements for healthy street trees. For a somewhat normal and healthy life, street trees must have a minimum volume of 120 cubic feet (CF) of growing medium. Two options are available to meet this need.

Tree grates: Large tree grates (4' x 12') can accommodate the necessary amount of soil using a 3' depth of planting mix.

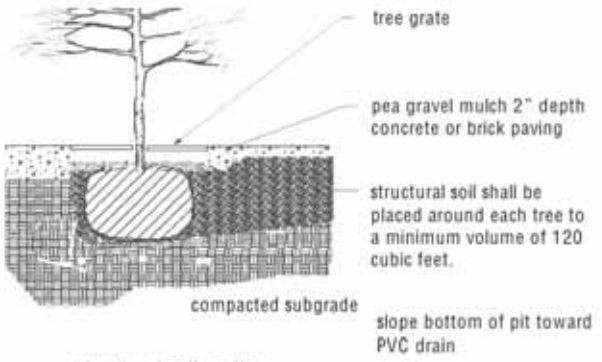
Structural Soil: Structural soil is intended to be used where tree grates and a large amount of paving are desired, such as trees

in grates along a commercial street where a tree lawn is not present or in a plaza setting. Structural Soil is a patented material that contains crushed stone, clay loam, and a hydrogel stabilizing material. These materials allow the planting mix to be compacted while keeping air space for roots. This method allows for trees to grow under walks and pavements without the potential for root heave, and allows the plants to live longer in an urban setting. This method of planting street trees provides a much larger planting area for the tree, while still allowing large expanses of paved area on top of the tree's soil area. This method uses a material, 'structural soil', that can be compacted to 95% density while still allowing free transfer of water and air to the tree roots. Structural soil's compaction ability makes it possible to construct concrete walk surfaces on top of the tree's root system. This method allows for a potentially larger planting area while only requiring a small grate at the tree. Where this method is used, a 4' x 4' tree grate is acceptable.

tree grate - 4' x 12'



street tree placement and spacing



structural soil section

Tree Lawns

Depending on the adjacent use and space between the right of way and the back of curb, tree lawns provide an adequate location for street tree placement. This area shall be a minimum of 5' wide. Tree lawns should be provided along residential streets and in commercial areas where there is a wider space (greater than 11') and where the pedestrian traffic between parked cars and the sidewalk is minimal.

2. Tree Size

Street trees need to be large enough at planting to allow pedestrians to pass under the lowest branches (about 8' clear) where directly adjacent to the walk surface or in tree grates. The minimum tree size for planting shall be two (2) inches caliper, and shall be balled and burlapped (B&B), nursery-grown stock.

Standard: Street trees that are adjacent to pedestrian walks shall be fruitless, thornless, single-trunked with an upright growth habit. All street trees shall be watered with an automatic irrigation system. All street trees shall be approved by the Parks Office prior to planting.

6' wide tree lawn on a residential street

tree lawn in a commercial area

3. Tree Species

The unique climate of Casper restricts the number of trees suitable for use as street trees. The following trees fit the microclimate of Casper and are the most adaptable to the soils, moisture and weather of the area. Other species may be added to this list with approval by the Parks Office.

Standard: All street trees shall be selected from the list below:

Street Trees:

- Redmond Linden (Tilia americana 'Redmond')
- American Linden (Tilia Americana)
- Shademaster Honeylocust (Gleditsia triacanthos 'Shademaster')
- Marshall's Seedless Ash (Fraxinus pensylvanical 'Marshall's Seedless')
- Summit Ash (Fraxinus pennsylvanica 'Summit')
- Common Hackberry (Celtis occidentalis)

Understory Trees

- Purpleleaf Plum (Prunus cerasifera)
- Chokecherry (Prunus virginiana)
- Flowering Crabapple (Malus sp.)
- Thornless Cockspur Hawthorn (Crataegus crusgalli inermis)

4. Tree Spacing

Uniform street tree spacing provides the cohesiveness and consistency along city streets.

Spacing from curb

Standard: All new street trees shall be planted a minimum of 30 inches from the face of curb, to align with street lighting and allow for car door swing.

Spacing between trees

Standard: Trees shall be planted between 30 feet and 40 feet on center, depending on the setting and desire of the adjacent property owner. This allows for adequate space between trees and lights, (20' +/-). It should be noted that a perfect spacing on any street is virtually impossible. Driveways, alleys, building canopies, underground vaults, regulatory signage and utilities are commonly encountered. Each property installing street trees within the right of way must coordinate spacing and tree species with adjacent properties. The 40-foot spacing is a guideline that should be followed to the degree possible.

5. Tree Grates/Sizes/ADA Issues/ Staking and Guying

Standard: Tree grates shall be set flush with the walk surface, with deviation in vertical plane of no more than one-quarter (¼) inch. All tree grates shall be set in a steel tree grate frame designed specifically to fit the tree grate. Tree grate frames are to be cast into the surrounding concrete or in a concrete curb below grade to support the frame and grate. The maximum grate opening shall be one-quarter (1/4) to three-

eighths (3/8) inch wide to meet the requirements of the ADA Standards (ADA 4.5.4). When guying is required, the tree guys shall run perpendicular to the direction of pedestrian traffic along the walk zone.


4'x4' tree grate at Center Street

Tree Grate

The recommended tree grate is Neenah Model #R-8757, 180 degree square with frame, 4' x 4' square. The recommended 4' x 12' grate is Neenah Model R-8815, 180 degree rectangular grate with frame.

Subsurface Drainage

One critical issue for street trees is sub-surface drainage system. Heavy, compacted soils drain slowly when they become saturated. A drainage system allows excess water to drain out, and provides oxygen to the soils surrounding the roots.

Standard: Where required for adequate sub surface drainage, subsurface drainage system should be 4-inch diameter perforated rigid or flexible plastic pipe, and should tie directly to the storm sewer system. All subsurface drainage systems shall be approved by the Director of City of Casper Public Services Department.

6. Planting Methods

All new plantings shall conform to the City of Casper Parks Division Standards.

7. Irrigation

Standard: All street trees and plantings within the right of way shall be irrigated with an automatic irrigation system. Plantings in small pots may be hand watered. Refer to City of Casper Design Standards for Public Works Construction and Infrastructure Improvements for approved irrigation materials.


existing concrete planter at Second Street

8. Planters

Planters and planter pots can be used as planting accents along the street. They can also be used to direct pedestrians or block possible hazards in the walk surface such as door swings. Planters can also serve as focal points along the street; the large planters on Second Street serve such a purpose. Planters shall be placed where they will not block the pedestrian way. (All planters located within the City right of way must be approved by the Public Services Director.)

Planter Types

i. Fixed Planters

Fixed Planters are defined as planters that are permanent and of a size that they require structural walls. These planters shall be constructed of concrete or brick and shall have a permanent irrigation system. No wood or timber planters are permitted within the right of way. Where feasible, the planters shall be approximately 16" in height for seating.

ii. Movable Planters

Movable planters are defined as large pots that allow for annuals and small shrubs to be planted and placed within the right of way and associated with a private business. These planters may be hand watered, and are to be paid for and maintained by the private property owner. Planters shall be made of durable materials such as precast concrete, fiberglass, or steel. No wood or timber planters are permitted.

Plant Types for Planters

Standard: Only annuals, perennials or grasses shall be planted in movable planters. Woody plants can be planted in fixed planters provided there is enough area to guarantee their survival over the winter months.

D. Street Furniture

Street furnishings enhance pedestrian comfort and add another layer of detail to the street environment. (All permanent street furnishings provided by private property owners shall reflect a historic character and be approved by the Public Services Director.)

1. Style and Materials

Standard: Furnishings be of a scale appropriate to the adjacent walk widths. Street furnishings must be constructed of heavy, durable materials that can withstand the heavy use and difficult conditions of the urban environment. These materials include steel or cast iron bases with wood or recycled slates. Site furnishing shall not be placed where they pose a barrier to pedestrians or vehicular traffic. In the downtown area, site furnishings shall be painted black to match the pedestrian lights.

2. Benches and Chairs

bench in amenity zone

Standard: Benches and chairs shall be located to offer pedestrians a place to stop and rest while looking at something interesting, such as plantings, storefronts, or public art. As an alternative to benches, chairs may be used so that people can face each other to have a conversation.

3. Trash Receptacles

Standard: Trash receptacles shall be located at convenient locations such as intersection corners and mid-block crossings. Materials for trash receptacles shall compliment adjacent site furnishings and should be made of strong, durable materials. Trash receptacles shall be required to have a windproof top. All locations for trash receptacles must be approved by the Public Services Department. City of Casper shall purchase trash receptacles when required.

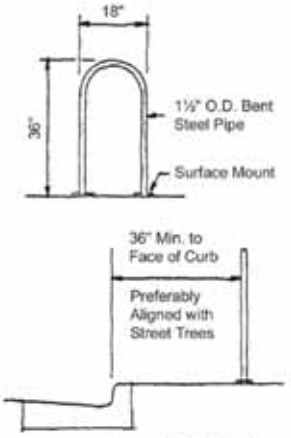
trash receptacles

4. Ash Urns

Standard: Ash urns should be placed near seating areas.

5. Bicycle Racks

Standard: Bicycle racks shall be located where they are visible from inside adjacent buildings, and where adequate space is available. Bicycle racks shall not be located where they will impede pedestrians, block views at intersections, or block entry or exit to adjacent buildings. Bike racks shall be the Inverted "U" style racks available from many different manufacturers. Inverted "U" racks shall be powder coated in black in the downtown area and green along the bikeway.



Inverted U bicycle rack

6. Newspaper Stands and Media Racks

Standard: Newspaper stands and media racks shall be grouped together to give a neat appearance and minimize use of space. Newspaper stands shall either be enclosed within a 'corral' or be part of a larger grouping of boxes, specially designed to consolidate the boxes.

Consolidated newsracks

Newsbox 'corral'

E. Lighting

1. Street Lights

As per City of Casper Public Services Department standards.

2. Ornamental Pedestrian Lights

Pedestrian lights can enhance the character of the street through selection of appropriate poles and fixtures. These poles and lights add another level of detail to the street and can have attachments that announce events, add seasonal color or display public art (such as the medallions already used along Second Street). The new downtown pedestrian lighting standard has already been implemented on north Center Street between First Street and Interstate 25. Maximum wattage for multiple light luminaries is 50 watts.

single globe pedestrian light on Second Street with sign bracket

Luminarie globes are to be translucent or glare free, utilizing obscure glass or acrylic lenses.

Place lights a minimum of 2 ½' from back of curb to allow room for car overhangs and door swings. Light poles shall be placed a minimum of 60' apart.

Ornamental lights shall be placed a minimum of 5' from the edge of the transition point adjacent to drives and alleys and at least 20' from the extended flow line of an intersection. Refer to page 8 for location diagram.

Single luminaries are preferred over multiple luminare lights. Multiple lights shall be used only at special locations and must be approved by the Director of City of Casper Public Services Department.

three globe pedestrian light on bikeway

Note: The following light fixtures are representative samples of approved lights in the City of Casper. Because of the many different manufacturers available and the constantly growing number of products available, lights from other manufacturers may be acceptable. All lights must be approved by the Director of City of Casper Public Services prior to purchasing.

Downtown Pedestrian Lights within the downtown area shall be:

Single Globe

Standard: Single globe lights shall be spaced 80-feet (+/-) on-center and shall be used at mid-block locations. Poles shall be placed 30 inches from the face of curb. Pole and globe shall match the color and shape of poles on Center Street.

Three Globe

Standard: Three globe light fixtures shall be used along significant and high profile street corridors as determined by the City of Casper. Poles shall be placed 30 inches from the face of the curb. Pole and globe shall match the color and shape of existing poles downtown.

Five Globe

Five globe lights are intended to identify the core of Casper downtown along Center and Second Streets. Five globe lights shall be used to highlight mid block crossings and other significant and historical locations in the downtown area as determined by the City of Casper and where other street lighting is not provided.

Pedestrian Lights along Second Street from Park to Wyoming Boulevard shall be single globe lights.

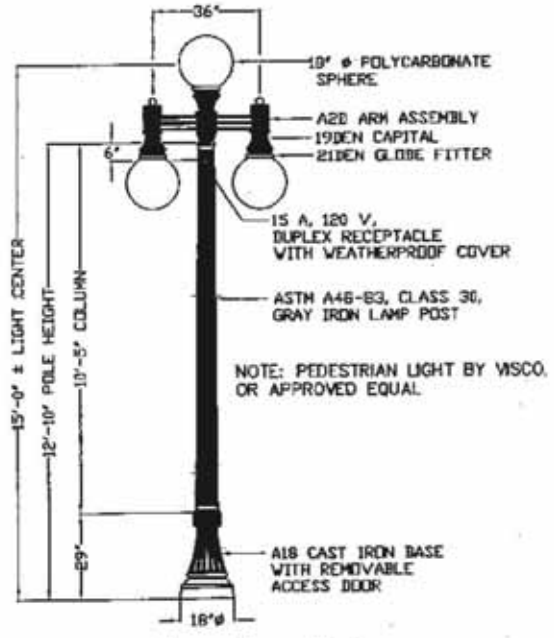
3. Electrical Outlets

Standard: Electrical outlets shall be provided at all pedestrian light poles, and at tree pits where possible. Outlets shall be GFI duplex, 15A/120V weatherproof outlets. Outlets shall be approved by City of Casper Public Services Department.

4. Attachments

Attachments on pedestrian poles may include flag brackets, and holders for permanent metal banners or medallions. Any attachment to pedestrian lights must be approved by City of Casper Public Services Department.

five globe pedestrian light at First and Center Streets



three globe specification

F. Public Art

Public art already has a prominent place in the downtown Casper streetscape. Many different sculptures, plaques, and even dinosaur footprints already exist. These pieces of public art add another layer of interest in the downtown area and provide elements that surprise people, educate people or create a dialogue between people. The current public art program should be continued and supported by the City and various downtown groups. All art placed within the public rights-of-way or public areas shall be approved by the City Council prior to installation. Council shall approve of all locations prior to the placement of public art.

public art in Casper funded by private/public donations

G. Maintenance and Irrigation

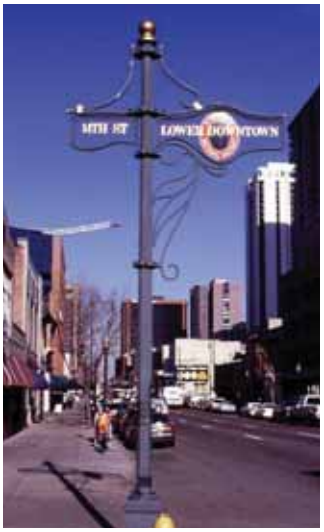
Refer to City of Casper Design Standards for Public Works Construction and Infrastructure Improvements, Section 8 for irrigation materials.

H. Signage

All informational, regulatory, and warning signs shall be installed on the City of Casper approved sign post. All signage shall be installed by the City of Casper Public Services Department.

1. Regulatory Signs
2. Informational signs
3. Wayfinding
4. Kiosks
5. Banners
6. Advertising (advertising signs shall meet City of Casper Zoning Regulations)

wayfinding signage in Casper



district identity signage

3 PARKING LOT STANDARDS

A. Parking Lot Screening

Parking lot screening provides a visual barrier between the fronts of cars and the pedestrian zone of sidewalks. These barriers provide a cleaner and more aesthetic edge to parking lots, and help strengthen the historic character of the area.

Location

Standard: Screening is required wherever private parking lots front onto the public rights-of-way or are adjacent to residential property.

Fencing and Walls

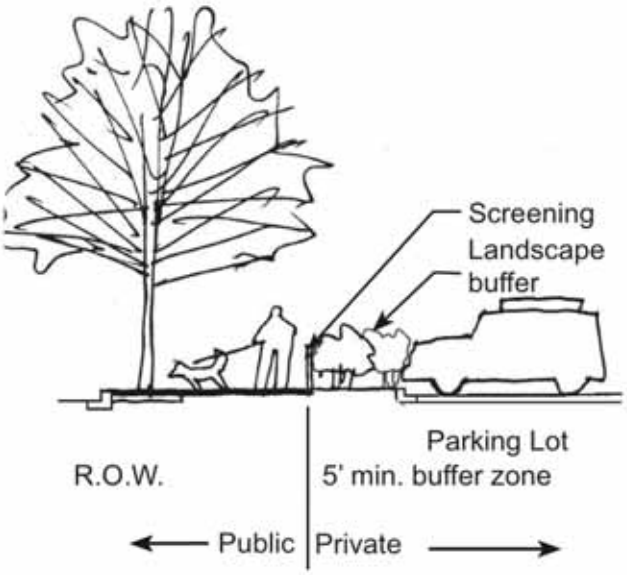
Standard: Metal fencing or brick walls shall have a maximum height of 36 inches. Fencing and walls shall be placed on the private property side of the public right of way. A 5' min. landscape buffer may be included with fencing immediately adjacent to the public right of way with plant materials that will shield the public right of way from headlight glare in the parking lot. Landscaping is not required for brick walls.

Metal Fencing: Metal fencing shall be of heavy gauge steel shapes. Metal posts shall be placed at a maximum spacing of 10 feet on-center; all metal shall be painted black in the downtown area or dark green to match street furnishings and pedestrian lights.

Brick Walls: Brick for screening walls shall complement the adjacent building materials or paving. Brick shall be standard building brick and should be a facing on either a concrete block or cast in place concrete wall. Both sides of the wall should be brick clad.

B. Parking Lot Landscape

Parking lot landscape helps to break up the large expanse of pavement associated with off street parking lots. The intent of this standard is to protect the appearance of surrounding uses by providing landscape improvements within the parking lot. Refer to the City of Casper Zoning Ordinance for other parking lot requirements.



parking lot screening

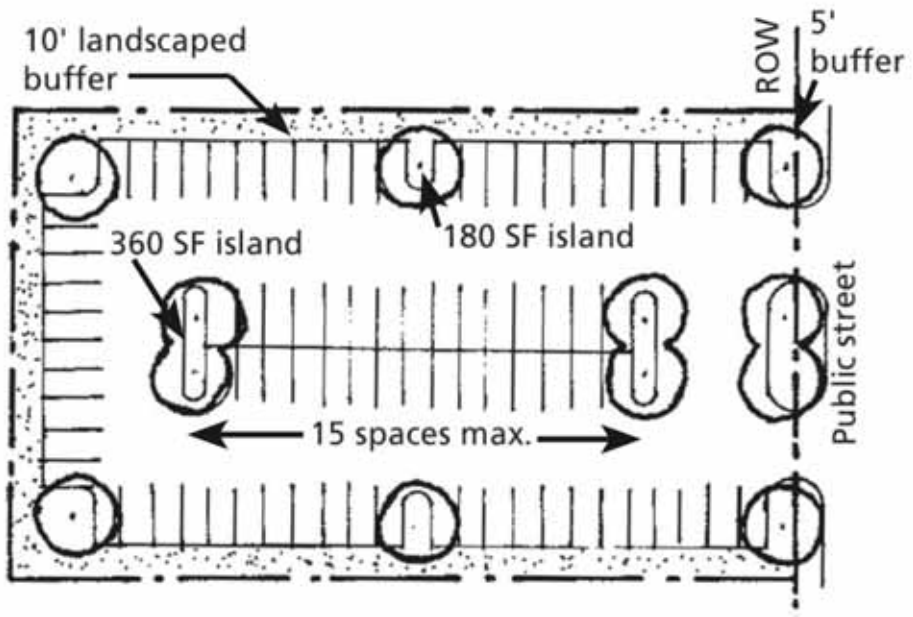
C. Storm Drainage and Runoff

Storm water and runoff should be captured, when possible, and directed toward landscaped areas.

D. Construction Requirements

Prior to any development of a new parking lot or major renovation of an existing parking lot involving building demolition, site improvements such as new paving, landscaping and/or building activity, the property owner or developer shall meet with the Public Services Director to develop buffering, screening, and/or landscaping requirements for the lot and shall implement those elements in the parking lot development or renovation. The resurfacing of an existing lot does not constitute major renovation and trigger the landscaping, buffering, and screening requirements spelled out in this chapter. The landscaping, buffering, and screening requirements will increase in scope and nature depending on the size of the parking lot.

parking lot landscape



4 BIKEWAY STANDARDS

Bikeways

A. Rails to Trails/Platte River Parkway

There are two major bikeways in the Casper area; they include the Rails to Trails bikeway along the old Chicago & Northwestern Railroad right of way from Poplar Street to Edness Kimball Wilkins State Park, and the Platte River Parkway from Paradise Valley to Bryan Stock Trail. These trails are intended to be both a bicycle and pedestrian trail and each of those uses are separated where space allows.

There are also many other smaller bikeways in drainages and along parks within the City. These bikeways should maintain a minimum width of a 10' bicycle/pedestrian path.

1. Bikeway Pavement

The bikeway pavement shall be 10' wide and be constructed of concrete or asphalt. A 3' clear zone should be provided at each side of the paved area. Concrete shall be 6" thick to allow for maintenance vehicles to drive on the trail. Crusher fines or compacted gravel may be used with the approval of the City of Casper Public Services Department. The 3' clear zone on each side of the path shall be graded at a maximum of 2%, and shall be native grass.

existing 10' wide bikeway

existing bikeway paving at an intersection

2. Pedestrian Walk Pavement

A pedestrian walk 3' in width may be provided adjacent to the bikeway. This walk may be concrete, asphalt or compacted gravel depending on the location. The walk should be separated from the main bikeway by a 12" minimum brick paver strip or grass buffer.

3. Street Crossings

Where the bikeway crosses City streets, a 10' x 10' band of brick paving shall be placed between the bike path and the back of curb to warn trail users of a potential conflict with vehicular traffic. Plantings, furnishings, and signage should not be placed where they create a visual blockage at street crossings.

Other elements that should be considered to improve street crossings for bicyclists are: raised crosswalks, median islands, and bulb-outs.

median island at intersection

4. Lighting

Where pedestrian scaled lighting is desired along the bike path, the lights shall match the pedestrian lights placed along the trail during Phase I. Spacing shall be 80'-90'O.C. Light shall be:
Luminaire: Whatley 1006 Luminaire Georgetown series 408.
Pole: Whatley 400 Series Ornamental Composite Fluted Tapered Lamp Post: Georgetown Model OE-408-12-GR-N6.

5. Signage

Signage along the bike path shall be placed where it is visible to bikeway users and does not create a hazard for bicyclists, pedestrians or vehicles at cross streets. Poles with color that matches ornamental lighting shall be used.

Stop Signs

Stop signs shall be placed adjacent to the bike path at all cross streets on the right side of the path. Signs shall be smaller than standard traffic signs and be 12" octagonal, metal signs.

Pedestrian Crossing Signs

Pedestrian crossing signs shall be placed along the cross streets to warn vehicles that pedestrians may be crossing. Signs shall be placed as per City of Casper Standards.

5 PARK STANDARDS

The Casper Parks system is a vital component to the health and image of the community. Each park within the system has been designed to address the specific needs of the neighborhood that it's located in. Because of the specific design characteristics of each park and the differing requirements of the site and the neighborhood, there is no single standard for what should be contained in a park or how it should be designed.

The City of Casper objectives for the use and design of landscaping on public property, parks, and athletic fields are as follows:

- To insure that no part of public open space is left without deliberate and well-designed landscape treatment.
- To reinforce the pedestrian environment established in the adjoining street right of way.
- To create public landscape that enhances the quality of both the public and private realm.
- To create public landscape that maintains and enhances the value of adjoining property.
- To create usable open spaces for the residents of the City of Casper.
- To ensure adequate buffering between adjacent land uses.
- To make existing public or private open space more useable.
- To connect open spaces to make an overall, accessible system.

A. Types of Parks

The City of Casper has the following types of parks within the Parks System:

1. Beautification Zones

These are areas that can vary in size from a few hundred square feet to many acres in size. They are distinguished from the standard designated park areas, since there is usually no designated use by the public. There may be exceptions to this in some areas where pedestrian walkways, benches, and lighting may be included. Most are intended as aesthetic visual enhancements and are generally located in high visibility areas along streets or associated with public buildings. They contain only hard and soft landscaping components.

2. Pocket Parks

Pocket Parks are usually 1 acre or less in size and can contain a small playground, small lawn areas, a small shelter, benches, and landscaping.

3. Neighborhood Parks

Neighborhood Parks are generally less than 5 acres and usually contain, playgrounds, picnic areas, shelters, benches, and landscaping.

neighborhood park

4. Regional and Community Parks

Regional and Community Parks are the largest city parks and will usually contain major dedicated athletic fields, specialized sports facilities such as a skateboard park, restrooms, formalized parking, larger playgrounds, lighting, pedestrian amenities, picnic shelters, and landscaping.

regional and community parks

5. Greenway/Natural Open Space

Greenways and Natural Open Spaces are typically low maintenance areas, such as drainage and riparian corridors, that include native plants. They can contain gravel trails, view areas with benches, and interpretive materials.

regional and community parks

B. Structuring Elements of Parks

There are a number of key structuring elements that need to be considered when designing parks. All of these elements must be studied and designed as an integral component. It also depends on what type of park, active or passive, that is desired. Active parks usually include formal ball fields, sports fields, court space, and large areas reserved for parking. Passive parks usually contain large amounts of landscape, open lawn or native grass areas, seating areas, and meandering walks.


regional park

1. Surrounding Influences

The types of uses that surround a park will define the edges of the park and what design parameters must be used to either buffer the surrounding use or integrate it into the park.

2. Landform

How the site is graded and how it drains are early decisions that need to be made in the design process. Landform will set the basic organization and layout of the park. Athletic fields need to drain properly to be successful, and adverse surrounding influences such as busy streets or industrial uses can be screened using berming and landforms.

3. Green Open Areas

Most parks are identified by the use of open lawn areas that can be used for formal and informal sports activities, or more passive uses such as picnics, sunbathing, or strolling. The more an open area can be designed as a multi-use field the more it will be used.

4. Places for People to Gather

Parks are places where the community comes together. Each park should have a central shelter or gathering spot with numerous other smaller, less formal areas throughout the park.

5. Places for Children

The incorporation of playgrounds and play areas for smaller children is critical to the success of a park. Playgrounds should have a wide range of play structures that allow children of all ages to play and learn in a safe and stimulating atmosphere.

6. Places to Walk

Each park/greenway should have an integral walk system that connects the major components of the park and allows for community members to walk through the park as part of their regular walking routine. Where possible, loop systems should be provided.

7. Landscape Materials

A healthy and thriving landscape is the back bone of any park and park system. Each type of plant needs to be specifically selected for the location, climate, soils and available water. All plants need to be selected for their drought tolerance to reduce the amount of irrigation needed and the parks need to be designed with the goal of minimizing water use. In the Casper climate, most plants should be watered as part of an automatic irrigation system. Natural low maintenance areas may include unirrigated plants.

8. Comfortable and Durable Amenities

Amenities add another layer of detail to a park. They can include benches, signage, shelters, lighting, paving materials, picnic tables, trash receptacles, and rest room facilities. These materials need to be durable and withstand heavy uses and the effects of the year round environment.


durable amenities

9. Safe and Secure

Each park needs to feel safe to the people who will use it. Views into and out of the park are important, dense vegetation should be avoided, and adequate lighting needs to be provided.

6 GLOSSARY


Bollards


Special crosswalk paving and curb ramp


Kiosk

Amenity zone The area from the inside of the curb to the sidewalk. This zone is where streetscape elements such as street trees, trash receptacles, bollards, news racks, benches, bike racks, and light fixtures should be located.

Bike lane A portion of a roadway, typically between the parking and travel lanes, which has been designated by striping and pavement markings for the exclusive use of bicyclists.

Bollards A three- to four-foot tall post or column constructed of concrete, stone, or metal, designed to separate pedestrian and vehicular traffic, define property lines, protect a work of public art. Bollards may also be used for property protection, traffic control and pedestrian safety.

Building zone The area adjacent to the right of way and the walk zone that may be used for outdoor seating, displays, and planters.

Crosswalk Portion of a roadway designated and marked for pedestrian crossing, typically at intersections, but potentially at designated midblock locations.

Curb cut A cut in the curb associated with a driveway. Provides vehicular access into a parking area, alley, or loading zone.

Gateway A distinctive element which marks the entrance of a district.

Intersection The area where two or more streets cross each other.

Kiosks A structure displaying wayfinding, special event or other information.

Parking zone The area adjacent to the traffic lanes for automobiles to park.

Pedestrian friendly Design qualities that make walking safe, comfortable and attractive. Detailed streetscape, restaurants, shops and easy-to-use public transportation are elements that contribute to a pedestrian-friendly environment.

Pedestrian zone The area of the sidewalk dedicated to pedestrian movement; this area must be free of all obstacles.

Pedestrian lighting Lighting that illuminates the sidewalk at a level that is consistent with pedestrian activities rather than vehicular activity.

Public art Art located in the public realm; public art may occupy a dedicated space such as a plaza, or may be part of the streetscape.

Public right-of-way The composite public area dedicated exclusively to circulation, both pedestrian and vehicular; this area typically includes the roadway and all or part of the sidewalk.

Sidewalks A walkway separated from the roadway with a curb, constructed of a durable, hard and smooth surface, designed for preferential or exclusive use by pedestrians.

Signage An informative public sign system that is incorporated into the downtown streetscape.

Street furniture Elements typically located in the public right of way are for use by pedestrians. Benches, trash receptacles, and bike racks are examples of street furniture.

Street trees Trees located in a tree lawn or tree grate to provide an effective canopy over the sidewalk and a portion of the street.

Streetscape The entire system of streets, sidewalks, landscaping, street furniture, and open spaces by which people circulate through and experience the downtown.

Street zone The section of the street in which vehicles and bicycles travel. The street zone includes bicycle lanes, vehicle lanes, and turning lanes.

Pedestrian light in the amenity zone

Refuge island in median

Signage for wayfinding

Street furniture


Tree grate


Tree lawn


Wayfinding

Tree grate A metal covering for a tree pit in the sidewalk.

Tree lawns A landscaped strip between the back of curb and sidewalk in which street trees may be located.

Walk zone The free and clear area of the sidewalk where pedestrians walk along the street.

Wayfinding A system of directional public signs that helps lead pedestrians and vehicles to destinations.