

CHAPTER 28

LANDSCAPE AND IRRIGATION IMPROVEMENTS WITHIN THE PUBLIC RIGHT-OF-WAY

INTRODUCTION

The purpose of this chapter is to promote consistently sound design of privately developed landscape and irrigation improvements within the Public Right-of-Way that is in accordance with City standards.

SECTION 1 - GOVERNING REGULATIONS

Following are overviews of several of the most important City regulatory documents pertaining to landscape design in the Public Right-of-Way. The list is not intended to be exhaustive, and the user is cautioned that these regulations are subject to change at any time. The designer must maintain a constant familiarity with these and other pertinent regulations as they evolve.

Refer to Chapter 23 of the DPM for American Association of State Highway and Transportation Officials requirements.

Comprehensive City Zoning Code (Article 14-16 R.O.A. 1994)

This document contains important regulations relating to landscape requirements, obstructions of sight distances within the right-of-way, and proximity of landscape elements to the traveled way.

Landscape Ordinance (Article 7-14-40 R.O. 1974)

This Ordinance includes, among other requirements, the requirement for the installation of landscaping to provide a visually attractive streetscape.

Street Tree Ordinance (Article 6-6 R.O.A. 1994)

This Ordinance requires the installation of trees along major streets.

Regulations for Street Tree Planting

These regulations are companion to the Street Tree Ordinance and govern plantings encouraged or required by the Ordinance. (EPC Resolution, adopted February 10, 1983)

Water Conservation Landscaping and Water Waste Ordinance (Article 6-1 R.O.A. 2015) and the Albuquerque Bernalillo County Water Utility Authority (Section 4)

This Ordinance requires the implementation of water conservation measures to reduce water use and reduce water waste.

City of Albuquerque Standard Specifications for Public Works Construction current addition to include updates and the Standard Details.

Greenspace Initiative

The Greenspace Initiative's intent is to encourage long term sustainable landscaping within the public right-of-way. The maintenance of public right-of-way landscape, which meets the Greenspace Initiative, DPM, and City of Albuquerque Department's requirements, shall be

assumed by the City's department responsible for maintenance after a two (2) year maintenance period. The DPM Chapter 28, Section 6, outlines requirements of the Greenspace Initiative.

SECTION 2 - GENERAL DESIGN CRITERIA

2.1 General Design Criteria: Medians

Landscaping within the Public Right-of-Way shall meet the criteria cited in Chapter 28 of the DPM, or as approved by the City of Albuquerque department responsible for maintenance.

Medians are defined as public right-of-way areas that provide a separation of traffic.

The City of Albuquerque, City Engineer or designee reserves the right to inspect irrigation and landscaping improvements within the Public Right-of-Way.

A 4" depth of gravel mulch shall be installed throughout the landscape areas with minimum four ounce, needle punched polypropylene weed barrier fabric under or as approved by the City of Albuquerque department responsible for maintenance. Fabric ends shall be overlapped 3". Edges of fabric shall be turned down 6". Top of landscape mulch shall be 1" below top of adjacent curb and/or sidewalk. Gravel shall be a 'warm tone' color (brown or brownish-red) or as approved by Department responsible for maintenance. Sizes of gravel may vary.

Boulders shall be 12 CF to 18 CF moss rock, or as approved by Department responsible for maintenance, buried min. 6" below bottom of gravel mulch.

Height of boulders shall not exceed the following:

Within six feet of back of Curb: maximum 8" height above top of curb

Six to twelve feet from back of curb: maximum 16" height above top of curb

Over twelve feet from back of curb: maximum 24" height above top of curb

The above height restrictions also apply to decorative landscape walls within the right of way.

No turf grass shall be permitted within the right-of-way.

A swale shall be provided continuously along the length of median to retain water within the landscape areas. Soil at back of curb shall remain undisturbed for a minimum width of 1'-0". Maximum slope on the sides of the swale shall be 10% gradient. Maximum depth of swale shall be nine inches below top of curb. Where there is an existing utility structure (manhole, pull box, etc.) within the area of a swale, it is acceptable to feather the grade at the swale to ensure that top of mulch is flush with top of utility structure. Gradient on feathered grade shall not exceed 1:5.

2.2 General Design Criteria: Medians

In addition to the design criteria described in Section 2.1, landscape within medians shall be in accordance with the following:

A parking area dedicated for maintenance vehicles shall be provided adjacent to the irrigation controller. Parking area shall be 23' length, 12' width with 12' wide flares on each side. Parking

area shall be integrally colored concrete (beige-tone), 6" thick.

The parking areas on medians with a width of less than 12' shall be defined by the City's Department responsible for maintenance.

Median noses shall be paved with colored concrete (beige or tan tone) with a broom finish and troweled edges at joints and perimeter.

Medians less than 6' wide shall be paved with colored concrete (beige or tan tone) with a broom finish and troweled at joints and perimeter.

SECTION 3 - IRRIGATION DESIGN CRITERIA

3.1 Irrigation Design Criteria: Medians

An automatic irrigation system shall be provided for the landscape improvements.

Automatic control valves shall be Rain Bird PEB plastic body automatic valve or as approved by the City of Albuquerque Department responsible for maintenance.

All valves shall be installed in valve boxes per City Standard Drawings.

Valve boxes shall be located so edge of valve box is minimum two feet from the edge of the mature spread of a shrub and minimum six feet from the edge of a tree root ball.

Valve boxes and lids shall be tan color.

A minimum of 36 inches shall be provided between adjacent valve boxes.

Irrigation system shall be a bubbler system. Drip and/or spray irrigation is not acceptable.

Bubblers shall be as follows:

Tree: 3 each 1.0 GPM bubblers (See note below regarding bubblers at trees.)

Vertical Shrub: 2 each 0.5 GPM bubblers

Shrub: 1 each 0.5 GPM bubbler

Yucca and other very low water-use shrubs: 1 each 0.25 bubbler

Bubblers shall be located three feet from the center of the tree trunk, triangulated around the root ball. Where a tree is located on a slope, two of the bubblers shall be located on the high side of the tree. (Note: If a landscaped area is too narrow to triangulate three bubblers around the root ball, two bubblers shall be installed, one on each side of the root ball. Where a tree is located on a slope, the two bubblers shall be located on the high side of the tree.) Bubblers shall be located 12" to 18" from the center of the shrub. Where a shrub is located on a slope, bubblers shall be located on the high side of the shrub.

Where there are significant changes in elevation, in-line check valves shall be installed on lateral lines as required to evenly distribute low head drainage.

An air relief valve shall be installed at each high point on the main line.

3.2 Irrigation Design Criteria: Medians

In addition to the design criteria described in Section 3.1, irrigation within medians shall be in accordance with the following:

The irrigation system shall be independent of other properties and shall have dedicated utilities. Irrigation system shall connect to a public water system non-potable line if available and if reliably charged.

Irrigation system shall have a cross connection device, installed and located in accordance with City and Water Authority standards.

Backflow preventer enclosure shall be a 'Hot Rok' or equal insulated enclosure, with heat tape and electrical power, hinged lid, clasp for lock and L-shaped metal clasp reinforcement. Backflow preventer and enclosure shall be installed in accordance with City Standard Drawings.

Irrigation controller shall be in accordance with current City standards and as approved by the City of Albuquerque Department responsible for maintenance.

Irrigation controller shall be installed in a UL rated enclosure per City standards or as approved by the City of Albuquerque Department responsible for maintenance. Enclosure shall be powder coated, color tan. Enclosure shall be mounted on a 6" thick slab of concrete with 4" wide lip on all sides, sloped away from the controller enclosure.

A master valve and flow sensor shall be provided per City standards and installed per City Standard Drawings. Communication wire for the flow sensor shall be black communication cable (with internal control wire and ground) dedicated to the flow sensor.

Electric service shall be provided to the irrigation controller and backflow preventer or as approved by Department responsible for maintenance.

The irrigation controller, backflow preventer and related equipment shall be located adjacent to the designated maintenance parking pad on the side of oncoming traffic.

Main line and lateral lines shall be located a minimum of five feet away from trunks of trees.

One bubbler shall be installed at each grounding rod at the irrigation controller.

SECTION 4 - PLANTING DESIGN CRITERIA

4.1 Planting Design Criteria: Medians

Trees shall be minimum 2" caliper, installed per City Standard Drawings.

Shrubs shall be minimum 1 gallon, installed per City Standard Drawings.

Minimum distance between mature spread of shrubs shall be 2'-0"

Minimum distance between a tree and the edge of a manhole collar shall be 8'-0"

4.2 Planting Design Criteria: Medians

Planting within medians shall be in accordance with the following:

All median landscapes shall be pursuant to the current prototype design templates and master plant list, as maintained by the City of Albuquerque Department of Municipal Development (COA DMD). The templates and plant list are subject to change at any time. The designer must verify the current design templates and plant list with COA DMD and must maintain a familiarity with these and other pertinent regulations as they evolve. The plant list is not intended to be

exhaustive. Other species may be used, if approved by the City of Albuquerque Department responsible for maintenance.

Trees shall be set back minimum 6'-0" from back of Curb.

A minimum two foot clear zone (area free of mature spread of shrubs and other improvements) shall be provided at back of curb.

SECTION 5 - REFERENCE

Any questions regarding Chapter 28 are to be directed to the City of Albuquerque Department of Municipal Development, CIP Official.

SECTION 6 — GREENSPACE INITIATIVE

6.1 Greenspace Initiative Intent

The Greenspace Initiative's intent is to encourage long term sustainable landscaping within the public right-of-way, and assist in the reduction of climatic and environmental challenges by building with nature. The components of the Greenspace Initiative include stormwater management, climate adaptation, improved economic development, reduction in heat stress, biodiversity, increased air quality, reduced energy use, cleaner water, and increased quality of life. Green infrastructure also serves to provide an ecological framework for social, economic and environmental health of the surroundings.

6.2 Greenspace Initiative

The City of Albuquerque Department responsible for maintenance will assume maintenance of public right-of-way landscape, in which it meets DPM and Department responsible for maintenance requirements, is approved as part of the City of Albuquerque Department responsible for maintenance's Greenspace Initiative, and is maintained to City Standards by the responsible party for a period of two (2) years from the date of completion. The landscape shall be subject to City inspections. Deficiency documented by the City Engineer or designated inspector shall be corrected by the responsible party within thirty (30) days of receipt of written "Notice of Noncompliance". On the conclusion of the two (2) year maintenance period the responsible party shall schedule a final turnover inspection with the City of Albuquerque Department responsible for maintenance. Upon the Department responsible for maintenance's verification that the landscape meets requirements, utilities are current, and the expiration of the two (2) year maintenance period, the Department responsible for maintenance will issue of a "Letter of Acceptance" acknowledging the City's receipt of utilities and maintenance responsibilities.

The Department responsible for maintenance and DPM Executive Committee may provide exceptions to the DPM Greenspace landscaping requirements within the Public Right-of-Way to meet other requirements, and or needs deemed by the Department responsible for maintenance to be integral component of the development.