



DEPARTMENT OF
TRANSPORTATION

STANDARD OPERATING PROCEDURE

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Landscape Additions in the Public Road Right-of-Way	SOP 620.01	1 of 6	Under Development

Approval: Ana M. Olivares, P.E.

PURPOSE:

To establish standards for design and installation of landscape additions within the public right-of-way for both Native Plant Preservation mitigation and landscape additions that do not require Native Plant Preservation Mitigation.

BACKGROUND:

This procedure outlines the requirements for the public to add landscaping within the public right of way. Landscape additions must meet standards of public safety, environmental and economic sustainability, and fit aesthetically within the context of the surrounding area. This procedure outlines landscape additions that fulfill one or more of the following goals:

- Increasing shade and vegetative cover,
- Creating and improving neighborhood identity at subdivision entries and along roadsides,
- Providing stabilization and erosion control,
- Increasing visual interest and creating “sense of place” in roadside and median areas devoid of vegetation,
- Taking advantage of excess roadway stormwater runoff by creating water harvesting areas, and
- Fulfilling mitigation requirements of Title 18.72, the Native Place Preservation Ordinance (NPPO).

DEFINITION OF LANDSCAPE ADDITIONS:

Landscape is defined as all vegetation (both naturally occurring native vegetation and introduced), irrigation, and hardscape elements, such as decorative paving, benches, rocks, boulders, and decorative walls. It includes native grasses and other understory native plants, in addition to the plants on the [Arizona Department of Agriculture - Protected Native Plants List](#) (see pages 46-53 of the linked pdf).

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PROCEDURE:

1. Landscape additions not fulfilling NPPO mitigation: Applicant shall submit a plan along with a [Right-of-Way Use Permit Application](#). Plans shall adhere to Section 3 of this procedure, be drawn to scale and include the following:

- Bar scale and north arrow
- Location Map
- Right-of-way line
- Pavement, including existing curbs and paths
- Utility locations-overhead and underground
- Topography – existing and proposed
- Structures in vicinity – i.e. walls, utility boxes, building, signs
- Street names
- Limits of disturbance used in constructing project
- Sight visibility triangles
- Drainage structures- i.e. curb inlets, drainage basins, culverts, etc.
- Existing vegetation in and adjacent to the project area.
- Existing washes
- Proposed plant types, including scientific name, container size, and quantities
- Lighting
- Existing Regional Flood Control District (RFCD) riparian areas (if applicable)
- Method of irrigation (if applicable)

2. Landscape additions fulfilling NPPO mitigation: Mitigation plantings that help fulfill requirements of the NPPO for an adjacent private development shall be shown on the project landscape plans submitted with the Tentative Plat or Development Plan. A separate landscape plan for the right-of-way is not required. All proposed landscaping shall adhere to Section 3 of this procedure.

- Landscape plans shall be reviewed by DSD staff assigned to review NPPO submittals. Landscape mitigation in the right-of-way shall be designed to be compatible with adjacent landscape bufferyard plantings.
- Landscape mitigation plans shall indicate watering methods that will insure long-term survival of plants. If an automatic irrigation system is used, an irrigation plan shall be submitted along with the landscape plan. Cacti generally do not require automatic irrigation systems, while irrigation systems are typically recommended

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for tree plantings. See 3(II) for irrigation requirements in the right-of-way.

3. Landscape Guidelines

I. All proposed landscape plantings shall follow these requirements:

- Setbacks from Utilities

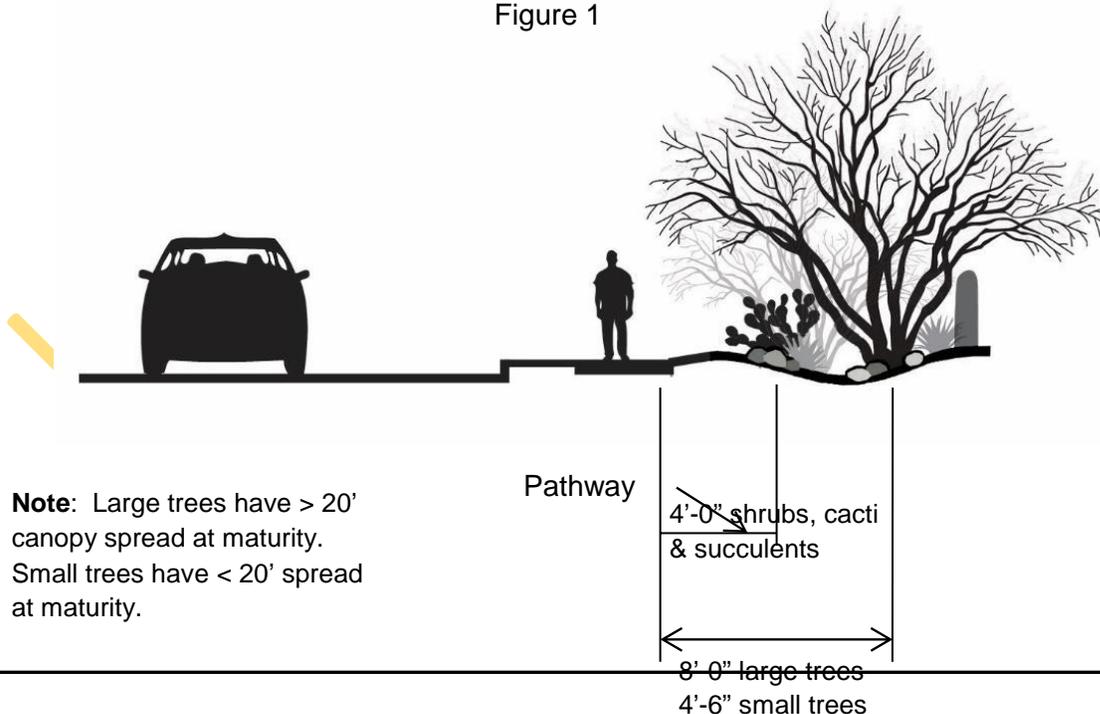
Utility	Requirement
Pima County Regional Wastewater	<ul style="list-style-type: none"> Minimum offset for trees = 10'-0" from sewer line if sewer is less than 8' deep Minimum distance for any vegetation from manhole = 3'-0"
Gas	Minimum offset for trees = 8'-0" from gas line
Electric	Overhead: <ul style="list-style-type: none"> Maintain 24'-0" each side of pole free from trees and shrubs No trees that grow taller than 15'-0" shall be within 15'-0" of power line Underground <ul style="list-style-type: none"> Minimum offset for trees = 10'-0" from line.
Water	<ul style="list-style-type: none"> Minimum 10'-0" from outside of tree root ball to outside of water line (15 gallon trees) Minimum 5'-0" from outside of tree root ball to water line (trees smaller than 15 gallon)
Communications	Minimum offset for trees = 4'-0" from either side of line

- Other setbacks

Plant Type	Requirement
Large Tree (Greater than 20' canopy spread at maturity)	8'-0" minimum from edge of shoulder or pedestrian path
Small Tree/Large Shrub	4'-6" minimum from edge of shoulder or pedestrian path
Small Shrubs/Cacti/Accents	4'-0" minimum from pedestrian path, face of curb, or edge of paving

- Plant selections:
 - a. Native plants observed growing in the immediate site vicinity or found historically within the project area, using the Pima County Sonoran Desert Conservation Plan Native Plant Website are recommended.
 - b. When a wider selection of plants is desired, plants shall be selected from the [Arizona Department Water Resources Low Water Plant List for The Tucson AMA \(Active Management Area\)](#) that is from the Sonoran or Chihuahuan Desert. Plants selected from this list will require a [License Agreement](#).
 - c. Plants not meeting the recommended setback distances require more frequent pruning and maintenance and shall require a [License Agreement](#).
 - d. Consideration should be given to placing appropriate shrubs and small trees within clear zone limits. No individual part of the plant shall be larger than 4" in diameter at mature size. Trees and shrubs that are twiggy in character with multiple branches are appropriate. Many desert trees could be classified as large shrubs and can be used in the clear zone.
 - e. Trees shall be selected that are multi-trunk or low branching and do not require staking. This form is typical of native desert trees. Planting structurally stable trees that do not require staking is preferred. If staking is used, it shall comply with American Nursery Association standards.

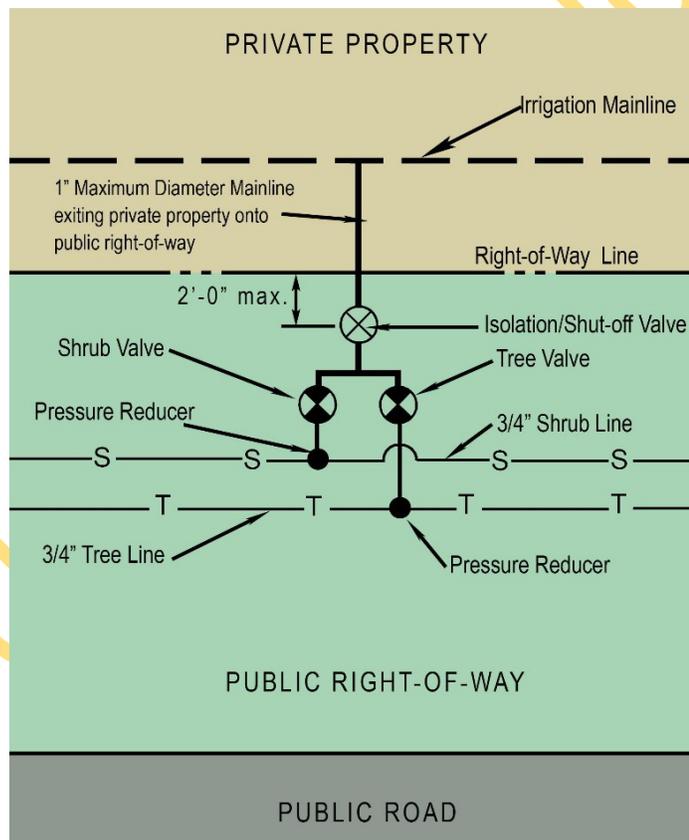
Figure 1



II. **Irrigation:** Applicant shall indicate method of watering new plantings. Proposed plantings of cacti and succulents may not require supplemental irrigation depending on what time of year they are planted. Natural rainfall may be supplemented with drip irrigation system when necessary. Irrigation methods may include one or a combination of the following:

- If the landscaping in the right-of-way requires only minimal irrigation, emitter lines may be extended from the adjacent private property's irrigation system into the right-of-way.
- If a more extensive irrigation system is required, the Landowner/Developer may choose to provide an irrigation system that is separate from the development's with its own dedicated water meter.
- If the Landowner/Developer proposes to provide irrigation from the system on site, then the conditions in Figure 2 apply. See Figure 2.

Figure 2



- Irrigation plans for the development shall be provided with the submittal.
- All irrigation piping shall be PVC Schedule 40
- The portion of the irrigation system extending into the right-of-way shall be accessible to PCDOT in accordance with the diagram at left.
- An isolation valve shall be installed within the right-of-way to enable the system to be shut off by PCDOT when necessary.

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- Stormwater harvesting may be incorporated in order to take advantage of natural stormwater runoff. Stormwater harvesting basins shall be shown on plan. Maximum depth of basins = 8". Guidance on designing stormwater harvesting basins can be found here:

[Low Impact Design and Green Infrastructure Guidance Manual](#)

- Truck watering, hand watering or other manual watering systems may also be used.

III. **Determining maintenance responsibility:**

- The applicant shall be responsible for the first year of landscape establishment. Pima County shall assume landscape maintenance responsibility after one year, for all landscape enhancements that meet the plant selection criteria of this SOP.
- All landscape additions in which plants non-native to the Tucson region are selected or that are planted closer than recommended distances shall require a [License Agreement](#). The applicant will be responsible for maintenance in perpetuity.

IV. **Disclaimer:**

It shall be recognized by applicant that Pima County may remove or trim plants in the County right-of-way at any time for road or shoulder widening, or if they become a safety hazard.