

Figure 27.9 - 3 (continued)

((O)11-15, Amended, 5/18/11)

Section 27.10 Environmentally Sensitive Lands

A. Purpose

The environmentally sensitive lands (ESL) regulations implement the Oro Valley General Plan by conserving natural, scenic, hillside, and cultural resources. This has been accomplished in a comprehensive manner by accounting for environmental, archaeological and historic resources, economic development, and housing policies. These regulations protect the public health, safety and general welfare by:

1. Conserving the Sonoran Desert and Heritage
 - a. Conserving the Town's natural and cultural resources in a comprehensive manner.
 - b. Utilizing current science of conservation biology and cultural resources treatment as represented in Pima County's Sonoran Desert Conservation Plan.

- c. Providing the greatest degree of preservation for the richest and most diverse ESL resources, including those described as “significant resource areas,” and “key” and “essential” habitat in the General Plan.
 - d. Enabling the long-term survival of native plants and animals by maintaining ecosystem functions necessary for their survival. Emphasis is placed on conserving landscape connections to ensure the continued viability of animal and plant communities.
 - e. Managing public access and use of environmentally sensitive open spaces to maintain conservation value.
2. Preserving Land Values
- a. Recognizing the importance of natural, scenic, and cultural resource conservation in sustaining Oro Valley’s identity as a desired place to live, work, and visit.
 - b. Ensuring conservation of the Sonoran Desert and scenic resources that enhance property values.
3. Implementing Community Planning and Design Expectations
- a. Developing a comprehensive ESL conservation system for the entire land area within Oro Valley in a manner that promotes interconnected open space.
 - b. Planning for land conservation and sustainable development by identifying specific environmental resources and applying regulations that account for General Plan growth expectations.
 - c. Enabling the conservation of wildlife habitat and other identified resources through context-sensitive site design.
 - d. Utilizing flexible design tools to enable a range of housing opportunities to accommodate the varied needs of residents.
 - e. Respecting efforts to ensure financial stability by establishing a diverse economy as specified in the Town’s Community Economic Development Strategy.
4. Protecting Lives and Property
- Protecting human life and property from recognized hazards including steep and unstable slopes and soils, flood and erosion hazards.
5. Utilizing an Equitable Regulatory Approach
- a. Applying new ESL regulations only to future rezonings and respecting existing development rights.
 - b. Ensuring land use intensity and density can be achieved in harmony with conservation goals through the application of meaningful incentives and flexible development options.
 - c. Providing opportunities for property owners not subject to ESL requirements to voluntarily opt in and thereby achieve greater zoning flexibility and conservation of environmental resources.

Purpose statements specific to an individual ESL resource are provided in relevant sections herein.

((O)11-01, Added, 2/16/11)

B. Applicability

1. General

- a. The provisions of ESL only apply to properties where specified environmental conditions are identified on the ESL Planning Map or described herein.
- b. ESL regulates specific types of development applications at various stages of the development approval process as delineated below:
 - i. All subdivision plat, site plan, conditional use permit, and permit applications subject to the Oracle Road Scenic Corridor, Tangerine Road Corridor Overlay Districts, and Cultural Resource Category shall comply with those respective requirements in subsection D.3 of this section.
 - ii. Rezoning applications, including new PAD applications, shall be subject to all the provisions of the ESL conservation system. Applications to amend PADs or rezoning conditions in effect prior to adoption of the ordinance codified in this section are subject to all requirements herein when the proposed amendment includes changes to density, intensity or use unless at least twenty-five percent (25%) of the site has been developed with infrastructure and finished building pads.
 - iii. Information regarding the primary conservation categories (major wildlife linkage, critical resource area and core resource area) shall be considered as part of major and minor General Plan amendment applications, in accordance with Section 22.2.
 - iv. Major and minor General Plan amendment applications for property which has not been mapped for environmentally sensitive lands conservation categories shall include mapping for primary conservation categories (major wildlife linkage, critical resource area and core resource area).
 - v. Conservation category mapping required by subsection B.1.b.iv of this section shall be completed in accordance with Addendum G and applicable provisions of this section. Following Town Council action on the General Plan amendment, the Planning and Zoning Administrator shall administratively update the ESL Planning Map upon certification that the mapping was completed in accordance with this section.
- c. Once a property is rezoned and open space is conserved as provided herein, environmentally sensitive open space (ESOS) percentages may not be cumulatively reapplied a second time to property or subsequent parcel splits as part of any custom home, subdivision plat, site plan, conditional use permit, and/or off-site improvement permits.

Rezoning on property previously subject to ESL will be evaluated by the Town Council on a case-by-case basis.

- d. All development activity on applicable properties shall comply with provisions specified in Table 27.10-1A or 27.10-1B, ESL applicability, respectively.
- e. Applicability is further established in each ESL section.

TABLE 27.10-1A Applicability for Non-Rezoning/Non-PAD Amendment Projects

Section Title and Notes	Code Section 27.10	Single-Family R1-300, 144, 43, 36, 20 Custom Homes	Subdivision Plat	Site Plan	Conditional Use Permit	Off-Site Improvement Permit
	ESLS					
Application Incentive	B.3	Y	Y	Y	Y	N
Major Wildlife Linkage	D.3.a	N	N	N	N	N
Critical Resource Areas	D.3.b	N	N	N	N	N
Core Resource Areas	D.3.c	N	N	N	N	N
Resource Management Areas	D.3.d	N	N	N	N	N
Cultural Resources	D.3.e	N	Y	Y	Y	Y
Scenic Resources	D.3.f	Y	Y	Y	Y	N
Scenic Resource Viewshed, Vegetation and Landscape Standards for Properties in the Oracle Road Scenic Corridor Overlay District. ¹ See Section D.3.f.iv.a for Specific Information	D.3.f ORSCOD	Y ¹	Y ¹	Y ¹	Y	N
Scenic Resource Viewshed, Vegetation and Landscape Standards for properties in the Tangerine Corridor Overlay District. ² See Section D.3.f.iv.a for Specific Information	D.3.f TCOD	Y ²	Y ²	Y ²	Y	N
ORSCOD Standards	D.3.f.vi.a	Y ¹	Y	Y	Y	Y
TRCOD Standards	D.3.f.vi.b	Y ²	Y	Y	Y	Y
Scenic Resources design guidelines	Addendum H	Y	Y	Y	Y	Y
Hillside Area Category	D.3.g	N	N	N	N	N
Hillside Development Zone	Addendum I	Y	Y	Y	Y	N

TABLE 27.10-1A Applicability for Non-Rezoning/Non-PAD Amendment Projects

Section Title and Notes	Code Section 27.10	Single-Family R1-300, 144, 43, 36, 20 Custom Homes	Subdivision Plat	Site Plan	Conditional Use Permit	Off-Site Improvement Permit
	ESLS					
Open Space Requirements	E.1 – 4	N	N	N	N	N
Riparian Habitat Overlay Ordinance	Addendum I	Y	Y	Y	Y	Y
ESOS Use and Development Standards	F.1	N	N	N	N	N
Development Balance and Incentives ⁴ Only Available When ESLS Is Applied to Property	F.2 ⁴	N	N	N	N	N
ESOS Design Standards	F.3	N	N	N	N	N
Mitigation	G.1 – 6	Y	Y	Y	Y	Y

Table 27.10-1B
Environmentally Sensitive Lands, Section 27.10 Applicability for Rezoning, PAD Amendments
and General Plan Amendments

Section Title and Notes	Code Section 27.10	Rezoning or Certain PAD Amendments ¹	General Plan Amendment
ESLS			
Application Incentive	B.3	N	N
Major Wildlife Linkage	D.3.a	Y	Y ¹
Critical Resource Areas	D.3.b	Y	Y ¹
Core Resource Areas	D.3.c	Y	Y ¹
Resource Management Areas	D.3.d	Y	N
Cultural Resources	D.3.e	Y	N
Scenic Resources	D.3.f	Y	N
Hillside Area Category	D.3.g	Y	N
Hillside Development Zone	Addendum I.1	N	N
Open Space Requirements	E.1 – 4	Y	N
Riparian Habitat Overlay Zone	Addendum I.2	N	N
ESOS Use and Development Standards	F.1	Y	N
Development Balance and Incentives	F.2	Y	N
ESOS Design Standards	F.3	Y	N
Mitigation	G.1 – 6	Y	N

¹ Information regarding primary conservation categories (major wildlife linkage, critical resource area and core resource area) shall be considered as part of major and minor General Plan amendment applications, in accordance with Section 22.2.

2. Exceptions

- a. This section does not apply retroactively to any development, residential or commercial, with an approved site plan or final plat prior to the date of adoption of the ordinance codified in this section.

Applications for a conditional use permit, site plan or preliminary plat for properties with zoning established prior to July 19, 2011, are exempt from the ESL conservation category open space requirements, Hillside Area category, ESOS use and conservation development, and mitigation requirements. In this case, the Hillside and Riparian Habitat Overlay District regulations in effect at the time of ESL adoption (included in Addendum H, Original Code Sections) must be utilized unless the property owner chooses to use ESL provisions, as provided herein.

- b. This section does not apply to PADs and PAD amendments approved by the Town Council prior to July 19, 2011. However, specific provisions and regulations in place prior to ESL adoption including Oracle and Tangerine Scenic Corridors, Riparian Habitat Overlay District, and cultural resource requirements continue to apply to PADs and PAD amendments approved prior to the adoption of the ESL conservation system.
3. ESL Application Incentive for Properties Not Subject to All ESL Requirements
 - a. The development regulations in any zoning district may be modified, as provided in subsection F of this section, if the property owner develops in accordance with Table 27.10-1B and all applicable provisions of subsections E and F of this section. This includes nonrezoning and non-PAD projects where compliance would not otherwise be required.
 - b. Such modifications to development regulations may only be granted in conjunction with the applicability provisions in subsection F.2.b of this section and the process specified in subsection F.2.c of this section.

((O)13-19, Amended, 9/18/13; (O)11-01, Added, 2/16/11)

C. Environmentally Sensitive Lands (ESL) Regulations and Maps

1. ESL Resource Identification

ESL regulations address properties where specific environmental conditions exist. The ESL maps, which are available at the Oro Valley Planning Division, have two (2) components: the Resource Science Map and the ESL Planning Map.

2. Adopted ESL Maps

a. Resource Science Map

i. Elements

Resource Science Maps identify the location of conservation categories that include specific resources as defined herein. Resource types include wildlife corridors, riparian areas, distinct vegetation, and critical habitats.

Known, biologically based, sensitive resources and associated conservation categories are consistent with Pima County's Sonoran Desert Conservation Plan. Each has been identified in Oro Valley through field review by resource professionals.

ii. Usage

The Resource Science Map is not a regulatory land use map. It is the basis for creating and maintaining the regulatory ESL Planning Map.

If an amendment to the ESL Planning Map is approved containing changes to the location of sensitive resources, the Resource Science Map shall be administratively updated by the Town as necessary.

b. ESL Planning Map

i. Elements

The Planning Map is constructed by merging the Resource Science Map with adopted General Plan land use and growth area designations. Six (6) categories, each corresponding to specific conservation requirements in these regulations, are

identified on the Planning Map including: major wildlife linkage; critical resource area; core resource area; resource management area-1; resource management area-2; and resource management area-3.

The resource management area category, in response to adopted land use policy, specifies three (3) levels of conservation based on planned growth patterns. Each is further described in subsection D.3 of this section.

ii. Usage

The ESL Planning Map is a regulatory land use map that shall be applied to relevant development applications and properties as outlined in subsection B of this section, Applicability.

c. Existing Overlay District Maps Adopted Prior to the ESL Regulations

i. Elements

The Existing Overlay Maps include the Riparian Habitat Overlay District, Tangerine Road Corridor Overlay District, and the Oracle Road Scenic Corridor Overlay District.

ii. Usage

The Overlay District elements remain as a regulatory land use map that shall be applied to relevant development applications and properties as outlined in subsection B of this section, Applicability.

3. Unmapped Resources

- a. The adopted ESL maps do not include the following environmentally sensitive resource categories: scenic resource areas, cultural resources and hillside areas. Identification and conservation of these three (3) resource types are addressed in subsection D of this section.
- b. Minor wildlife linkages, rock outcrop locations, and areas of distinct vegetation shall be identified as part of the development application review (rezoning and conceptual site plan, as applicable) process. Discovery of these resource types requires their conservation in accordance with subsection D of this section, Table 27.10-2.

4. ESL Map Amendments

- a. If the location and quality of environmentally sensitive resources naturally change over time to the extent that resource threshold criteria are not achieved, or resources have been mapped incorrectly, a request for ESL Planning Map amendment may be filed in accordance with Section 22.3, Amendments and Rezoning.
- b. Mapping of resources shall be performed by a qualified specialist in habitat biology, as defined in Chapter 31. All evaluative work shall be completed in accordance with these regulations. The specialist shall certify in writing that the identification of resources was completed in accordance with these regulations.
- c. Any approved General Plan amendment that results in changes to the land use or growth area designations shall require a map amendment to the corresponding resource management area category(ies) in Table 27.10-3. ESL map changes reflecting an adopted General Plan amendment shall be approved administratively.

((O)13-19, Amended, 9/18/13; (O)11-01, Added, 2/16/11)

D. Environmentally Sensitive Lands Conservation System

1. Conservation System

ESL represents an interconnected system of resource conservation. The components of the system include seven (7) distinct categories for the purpose of conserving resources as open space. Key and essential biological resources are included in four (4) ESL categories:

- a. Major wildlife linkage;
- b. Critical resource;
- c. Core resource; and
- d. Resource management.

Environmentally sensitive resource categories that are nonbiologically based include:

- e. Cultural resources;
- f. Scenic resources; and
- g. Hillside areas.

2. Categories

Each category includes distinct definitions and requirements that shall be applied independently when multiple categories occur on a site.

3. Conservation Categories

ESL conservation system categories and related conservation requirements are listed below.

a. Major Wildlife Linkage (MWL) Category

i. General

Major wildlife linkages include identified large mammal corridors or landscape linkages between public preserves and open spaces.

ii. Conservation

- a) Major wildlife linkage areas shall be conserved as environmentally sensitive open space (ESOS) in accordance with Table 27.10-2. ESOS is defined in Chapter 31 and further described in subsection E.1 of this section.
- b) The required percentage of ESOS shall be applied to areas identified on the ESL Planning Map.

iii. Resource Science and Identification

- a) Major wildlife linkages provide essential connectivity that maintains the viability of the areas' habitat by providing for dispersal, migration, and genetic transfer for wildlife and plants.

- b) In order to maximize wildlife movement within identified corridors, these corridors must be maintained as natural open space linkages with ground disturbance strictly limited to provisions in subsection F.1 of this section.
 - c) MWLs include the Santa Catalina-Tortolita Mountains linkage, riparian areas, upland linkages and identified regional roadway crossings.
- b. Critical Resource Area (CRA) Category
- i. General

The critical resource area open space category includes the following environmentally sensitive resources as defined herein.

 - a) Riparian areas and minor wildlife linkages
 - b) Major rock outcrops and boulders
 - c) Distinctive habitat resource
 - ii. Conservation
 - a) Critical resource areas shall be conserved as environmentally sensitive open space (ESOS) in accordance with Table 27.10-2. ESOS is defined in Chapter 31 and further described in Section E.1.
 - b) The required percentage of ESOS shall be applied to areas identified on the ESL Planning Map and field verified boundaries of major rock outcrops and boulders. Major rock outcrops and boulders are subject to discovery on a site-by-site basis.
 - c) Degraded or disturbed riparian segments within areas identified on the ESL Planning Map must be restored and enhanced to support their biological, hydrologic and geomorphologic functions. These areas will be credited as follows:
 - 1) Restoration areas will be applied toward total ESOS requirements.
 - 2) A proportional area will be exempt from Native Plant Salvage and Mitigation requirements in Section 27.6B. This does not apply to any plant listed as threatened or endangered under the Endangered Species Act or highly safeguarded by the Arizona Department of Agriculture.
 - d) ESOS shall be configured and maintained in accordance with subsections E and F of this section.
 - iii. Resource Science and Identification
 - a) Riparian Areas and Minor Wildlife Linkages
 - 1) Riparian areas are an essential element of the Town's environmentally sensitive lands and constitute the framework for the linkages and landscape connections necessary to support a viable ecosystem and wildlife habitat.
 - 2) Riparian areas occur in association with a spring, cienega, lake, water course, river, stream, creek, wash, arroyo, or other body of water, either

surface or sub-surface, or any channel having banks and beds through which water flows, at least periodically.

- 3) Identification of riparian areas is based on species composition, general density/size, vegetation volume, wildlife habitat, nutrient cycling, erosion control, water quality, and flood moderation. Specifications are provided in Addendum G, Section 1.
- 4) Minor wildlife linkages are composed of upland areas and degraded riparian areas. Degraded areas include hardened drainage ways and constricting drainage structures. These minor links are important in maintaining connectivity within the open space system identified in the ESL.

b) Major Rock Outcrops and Boulders

- 1) Rock outcrops and boulders are comprised of exposed bedrock formations and boulder piles and scatters with a minimum size of one hundred (100) square feet as measured horizontally, and a minimum of ten (10) vertical feet.
- 2) Rock outcrops and boulders provide wildlife habitat and afford thermal regulation for wildlife, particularly reptiles.
- 3) Outcrops and boulders are also a significant scenic resource.
- 4) Rock outcrop and boulder features shall be identified in the Site Resource Inventory (Section 27.6.B.3) and clearly delineated on site plans and subdivision plats.

c) Distinct Habitat Resources

“Distinct habitat resources” include the following habitat elements:

- 1) Natural caves, crevices, or mine shafts with a minimum cavity area of two hundred twenty (220) cubic feet (approximately six (6) feet by six (6) feet by six (6) feet). Excavations or test pits are not included.
- 2) Groundwater seeps, whether intermittent or perennial.

c. Core Resource Area (COR) Category

i. General

Core resource areas include the following environmentally sensitive resources as defined herein.

- a) Pima County Conservation Lands System, biological core management areas adopted by the Board of Supervisors, June 2005.
- b) Special status species habitat supporting five (5) or more priority vulnerable species.
- c) Distinctive native plant stands.

- ii. Conservation
 - a) Core resource areas shall be conserved as environmentally sensitive open space (ESOS) in accordance with Table 27.10-2. ESOS is defined in Chapter 31 and further described in subsection E.1 of this section.
 - b) The required percentage of ESOS shall be applied to areas identified on the ESL Planning Map and field verified locations of distinctive native plant stands.
 - c) ESOS shall be configured and maintained in accordance with subsections E.1 and F of this section.
- iii. Resource Science and Identification
 - a) Core resource area open spaces support biological diversity by conserving recognized wildlife habitat. Core resource areas include all areas designated biological core management area by the Pima County Conservation Lands System and areas identified by field review and evaluation by resource professionals.
 - b) Core resource areas may contain significant stands of vegetation that support biological diversity and are integral to the Town's distinctive character.
 - c) Special status species habitats, as defined in Addendum G, Section 2, that include five (5) or more vulnerable species targeted for conservation.
 - d) Distinctive Native Plant Stands

Distinctive native plant stands are areas of native vegetation that exist in contrast to the majority of the surrounding vegetative community due to either microclimates or availability of water sources. Section 27.6.B.3.b.i includes defining criteria.
- d. Resource Management Area (RMA) Category
 - i. General
 - a) Special status species habitat supporting three (3) or more priority vulnerable species.
 - b) The RMA category is divided into three (3) areas merging resource science with adopted future land use designations and intensities as specified in the General Plan. Table 27.10-3 indicates the three RMA areas and associated General Plan land use designations.
 - c) Distinctive individual native plants.
 - d) Minor rock outcrops or boulders.
 - ii. Conservation
 - a) The resource management area category supports utilization of identified lands based on planned land use intensities consistent with the General Plan while requiring minimum levels of sensitive land conservation.

- b) The RMA category specifies minimum ESOS amounts for each area. Table 27.10-3 indicates ESOS requirements by land use designation. ESOS is defined in Chapter 31 and further described in subsection E.1 of this section.
 - c) The required percentage of ESOS shall be applied to areas identified on the ESL Planning Map and field verified boundaries of minor rock outcrops and boulders and distinctive individual native plants. Major rock outcrops and boulders and distinctive individual native plants are subject to discovery on a site-by-site basis.
 - d) ESOS shall be configured and maintained in accordance with the requirements of subsections E and F of this section.
- iii. Resource Science and Identification

The resource management area category merges environmentally sensitive resources and public policy:

- a) Special status species habitats, as defined in Addendum G, Section 2, that include three (3) or more vulnerable species targeted for conservation.
- b) The resource management area (RMA) category couples refined mapping of Pima County multiple use management areas with the adopted land use policies of the General Plan.
- c) Criteria in Addendum G, Section 3, were used to refine mapping of Pima County multiple use management areas.
- d) A distinctive native plant refers to any native tree, shrub, or cacti with extraordinary characteristics such as, but not limited to, age, size, shape, form, canopy cover, or aesthetic value. Further definition is provided in Section 27.6.B.3.b.i.
- e) Minor Rock Outcrops and Boulders
 - 1) Minor rock outcrops and boulders are comprised of exposed bedrock formations and boulder piles and scatters with a minimum size of one hundred (100) square feet as measured horizontally, and a minimum of three (3) vertical feet.
 - 2) Rock outcrops and boulders provide wildlife habitat and afford thermal regulation for wildlife, particularly reptiles.
 - 3) Rock outcrop and boulder features shall be identified in the Site Resource Inventory and shall be clearly delineated on site plans and subdivision plats.

TABLE 27.10-2: ESL Categories: Minimum ESOS

Category	Minimum ESOS Percentage
Major Wildlife Linkage	100
Critical Resource Area	95
Core Resource Area	80
Resource Management Area-1	66

TABLE 27.10-2: ESL Categories: Minimum ESOS

Category	Minimum ESOS Percentage
Resource Management Area-2	25
Resource Management Area-3	0

**TABLE 27.10-3:
 Resource Management Area
 Minimum ESOS by General Plan Designation**

RMA Areas	Area 1	Area 2	Area 3
Minimum ESOS	66%	25%	0%
General Plan Land Use Designation	Rural Low Density Residential 0 – 0.3	Neighborhood Commercial / Office	Growth Areas
	Low Density Residential 0.4 – 1.2	Community / Regional Commercial	
	Low Density Residential 1.3 – 2.0	Commercial / Office Park	
	Resort/Golf Course	High Density Residential	
	Open Space	Medium Density Residential	
	School, Park	Public/Semi Public	
		MPC Rooney	
MPC Kai Capri			

e. Cultural Resources Category

“Cultural resources,” as defined in Chapter 31, include a variety of historic sites and buildings, prehistoric sites, archaeological sites and supporting materials and records.

i. Purpose

The cultural resources category is intended to:

- a) Implement the Town’s General Plan goals and policies for conservation of cultural resources; and
- b) Protect cultural resources that are recognized to have enduring value in advancing education, general welfare, civic pride and appreciation of the Town’s heritage in order to perpetuate the unique character of Oro Valley; and
- c) Establish regulatory criteria for the identification, assessment and protection of significant cultural resources; and
- d) Prevent or reduce adverse impacts to significant cultural resource sites by employing treatments that range from in-place preservation to various degrees of mitigation; and
- e) Integrate cultural resources in the environmentally sensitive lands system to provide for the conservation of significant cultural resources in concert with other sensitive resources.

ii. Mapping

To protect sensitive sites, archaeological resources shall not be included on maps for general public distribution. Environmentally sensitive lands system maps do not include the location of cultural resource sites.

iii. Applicability

This section shall apply to all development which requires a rezoning, preliminary plat, site plan or amendment to these items. Associated off-site development and ancillary construction (utility trenches, water and sewage treatment facilities, roads, etc.) will be treated in the same manner.

iv. Conservation Strategies

a) Cultural resources may occur individually or in combination with other environmentally sensitive resources. Conservation of significant cultural resources shall be applied through one (1) of the following three (3) strategies:

- 1) Preserved in Place: significant resources shall be preserved in place in order to protect the cultural or historic value of the resource as specified in the approved treatment plan; or
- 2) Combination: significant resources shall be partially preserved in place and partially mitigated as provided in the approved treatment plan; or
- 3) Treatment: significant resources shall be reused or mitigated as prescribed by the approved treatment plan, allowing reuse of the site.

b) A conservation strategy shall be assigned by:

- 1) Determination of significance.
- 2) Agency review comments.
- 3) Evaluation in relation to other environmentally sensitive resources.
- 4) Development and acceptance of a treatment plan.

v. Review Procedures

a) A cultural resource professional shall perform a records search of all cultural resource records of the State Historic Preservation Office, the Arizona State Museum, AZSITE archaeological resource database and the Town of Oro Valley Cultural Resources Inventory to determine whether any surveys have been completed for the property.

b) A cultural resources survey and inventory report that meets the Town of Oro Valley submittal requirements shall be prepared by the Planning and Zoning Administrator appointed cultural resource professional if:

- 1) Records indicate no cultural resource surveys of the subject property have been completed; or
- 2) Surveys of the property are more than ten (10) years old and sites were recorded in the survey; or

- 3) The existing survey and report lack sufficient information to determine significance in accordance with subsection D.3.e.v.e of this section; or
- 4) The Arizona State Museum recommends an updated survey.
- c) If the survey indicates there are no cultural resources present at the site or the resources are determined not significant in accordance with subsection D.3.e.v.e of this section, the review process is complete.
- d) If a new or updated survey is required, an appropriate cultural resource professional must complete the survey and treatment plan, as necessary.
 - 1) If resources are present, the survey shall include a recommendation, based on the criteria contained in this section, regarding National Register and local cultural resource significance and integrity.
 - 2) If significant resources are present, a cultural resource professional with appropriate specialization must develop a treatment plan for the specific resource.
- e) Determination of Significance and Integrity
 - 1) The list of known significant cultural resources maintained by the Town of Oro Valley shall be consulted. Identified resources are subject to requirements in this subsection D.3.e.
 - 2) For unevaluated resources or when significance is undetermined, the determination of significance shall be based upon the evaluation of National Register and local community criteria.
 - A) National Register criteria shall be applied to determine eligibility for listing in the National and State registers of historic places in accordance with the National Historic Preservation Act of 1966, as amended, and the Arizona State Historic Preservation Act of 1982, as amended.
 - B) Local community criteria are used to identify sites which are important to a local group or the Oro Valley community, or a place of ancestral occupation or activity of recognized value.

Cultural resources are locally significant if the resource is preserved in a condition of scientific integrity and the property or resources contribute to:

- i) The unique identity of the community; or
- ii) The enhancement of community economic, educational or recreational needs; or
- iii) The understanding of the unique religious, mythological, or social character of a discrete population within or outside the community.

3) Determination of Significance

- A) A determination of significance may only be made by a cultural resource professional.

- B) The Planning and Zoning Administrator shall review the determination to ensure all appropriate resources surveyed and criteria have been addressed.
 - C) If the determination is deemed inadequate, the Planning and Zoning Administrator shall consult the State Historic Preservation Office and may also consult another cultural resource professional for a new determination of significance.
 - D) The process to determine resource significance must be completed within forty-five (45) days of a complete development review application submittal.
 - E) Once a determination is accepted by the Planning and Zoning Administrator, the cultural resource professional shall submit a treatment plan prepared in accordance with subsection D.3.e.v.f of this section.
- f) Treatment Plan
- 1) The treatment plan shall meet all submittal requirements and the following requirements:
 - A) Address specific findings and provide details of and justification for the conservation strategy that is proposed, as defined in subsection E.4 of this section.
 - B) Define a plan to protect preserved-in-place resources during construction and/or promote data recovery through a documentation plan for those resources which will be mitigated or removed.
 - C) Employ tools which will result in the permanent protection of significant resources including, but not limited to, conservation tract, dedication to stewardship organization or public displays.
 - D) Develop a specific treatment plan implementation schedule in concert with the Planning and Zoning Administrator and the applicant to ensure resource conservation and necessary flexibility.
 - E) Identify an organization that will assume long-term stewardship responsibility for significant cultural resources by managing preserved-in-place resources or documenting and conducting further study of resources that are mitigated or removed.
 - F) Recommend the appropriate methods to ensure public education and access, if appropriate, to the cultural resources.
 - G) Provide a benefit to the immediate community, broader stakeholders, or academic community that is commensurate with the significance of the cultural resource.
 - 2) Phased Developments:
 - A) The treatment plan shall incorporate the entire development. The implementation of the approved treatment plan may occur incrementally for each phase that contains cultural resources.

- B) In the event that the impact to a cultural resource site spans more than one (1) development phase, implementation shall address all phases of work at the site.
- g) Treatment Plan Review and Decisions
 - 1) The Planning and Zoning Administrator may approve the treatment plan upon consideration of the following:
 - A) Recommendations of the Cultural Resource Professional and State Historic Preservation Office.
 - B) Provisions for specific cultural resources within local and regional plans accepted by the Town which include, but are not limited to, the Oro Valley Cultural Resources Preservation Plan and Sonoran Desert Conservation Plan.
 - C) Nature, condition and extent of other environmentally sensitive lands to optimize conservation of all resources.
 - 2) Prior to Town Council review of a development application specified in subsection D.3.e.iii of this section, or permitting of development, earth-work, construction, remodeling, change or alteration of any proposed or existing project, the property owner or his/her designated agent shall secure approval of the treatment plan.
 - 3) The Town of Oro Valley process to approve a treatment plan must be complete within thirty (30) days of formal State Historic Preservation comment.
- vi. General Requirements
 - a) Cultural Resource Professional
 - 1) All cultural resources research, surveys and treatment plans shall be conducted by a cultural resource professional.
 - 2) Secretary of Interior standards for professional qualification must be satisfied.
 - 3) The cultural resource professional utilized must be selected by the applicant from a pre-qualification list maintained by the Planning and Zoning Administrator.
 - b) Disturbance
 - 1) No physical disturbance of an unevaluated site shall be permitted, including artifact collection or excavation.
 - 2) No disturbance of significant cultural resource sites shall be permitted unless specifically indicated in the approved treatment plan.
 - 3) Cultural resources that are to be preserved in place shall be protected during development activities by the manner specified in the treatment plan.

- c) Discoveries
 - 1) If any unrecorded cultural resources are encountered during the grading/excavation process, all work shall cease in the immediate vicinity of the resources and a qualified archaeologist shall be consulted to assess the significance of the resources and prepare recommendations in accordance with the review process specified in subsection D.3.e.v of this section.
 - 2) If a treatment plan is required, it shall be submitted and reviewed in accordance with subsection D.3.e.v.f of this section.
 - 3) Treatment Plan Review and Decisions
 - A) Construction may proceed in other areas of the site during the review process in a manner that ensures protection of a cultural resource discovery.
 - B) Disclosure of information regarding the location and nature of the cultural resources shall be restricted, except as required for avoidance and protection of the resource.
 - C) A determination of significance and/or completion of a treatment plan shall be accomplished within twenty (20) days of discovery notice to the Planning and Zoning Administrator.
- d) Treatment of Human Remains
 - 1) If human remains are known to exist on the site or are discovered in the course of construction, an agreement for the treatment of the human remains shall be developed with the Arizona State Museum (ASM) and appropriate cultural groups pursuant to A.R.S. Sections 41-844 and 41-865.
 - 2) The agreement shall be established prior to any archaeological investigation.
 - 3) The property owner shall comply with State and Federal laws regarding the treatment of human remains, even if a treatment plan has been approved.
- e) Prior to issuance of any Town permits, consultation with the State Historic Preservation Office (SHPO) shall be completed if the development:
 - 1) Occurs on Federal or State land; or
 - 2) Receives funding from a Federal, State, or County agency; or
 - 3) Arises from circumstances dictated by Federal or State regulation; and
 - 4) Is subject to review as specified herein.
- f) Excavations on Public Property
 - 1) No individual shall be allowed to use a probe, metal detector or any other device to search or excavate for artifacts on public property, nor

can any individual remove artifacts from public property without the written permission of the Town.

- 2) No disturbance or construction activities shall be authorized within the properties belonging to the Town, including public streets and rights-of-way, without a Town permit and compliance with the requirements of this section.
- g) Conservation credit for significant cultural resources under the environmentally sensitive lands system.
 - 1) Land designated as ESOS and a protected cultural resources site in accordance with an approved treatment plan shall qualify as required ESOS on a one to three (1:3) basis (each square foot of cultural resource site shall equal three (3) square feet of required ESOS).
 - 2) The area to be preserved in perpetuity shall be accurately indicated in the treatment plan prior to its approval.
 - 3) Only areas within the cultural resource site, as identified in the treatment plan, are eligible for the ESOS credit.
- vii. Appeals and Reviews
 - a) Within twenty (20) days of a decision, the applicant may appeal a determination of significance to the Historic Preservation Commission when local community review criteria are the sole source of analysis. An appeal of a determination based on National Register criteria is strictly subject to State and/or Federal review.
 - b) The applicant may appeal the Planning and Zoning Administrator's approval or denial of a treatment plan to the Historic Preservation Commission within twenty (20) days of a decision.
 - c) A hearing on an appeal shall be scheduled within thirty (30) calendar days of the request. The Historic Preservation Commission shall hold a hearing and may approve, disapprove, approve with stipulations or remand the case for additional analysis.
 - d) Notice of the hearing shall be posted on the property at least ten (10) calendar days prior to the hearing.
 - e) The Historic Preservation Commission may review any treatment plan approval by the Planning and Zoning Administrator. In order to overturn the Planning and Zoning Administrator's approval, the Historic Preservation Commission is required to find an abuse of discretion on the part of the Planning and Zoning Administrator. The Historic Preservation Commission may subsequently uphold, modify or overrule the Planning and Zoning Administrator's determination.

Notice of Historic Preservation Commission review shall be initiated within fifteen (15) days after the Planning and Zoning Administrator's approval in writing to the Planning and Zoning Administrator. Failure of the Historic Preservation Commission to make a timely review results in the decision of the Planning and Zoning Administrator deemed to be final, with an appeal to the Town Council available to the applicant.

In the event the HPC timely initiates their appeal, the applicant will be notified within an additional fifteen (15) days of the time and place for the hearing. Review by the HPC shall be completed within thirty (30) days of initiation by the Historic Preservation Commission or the decision of the Planning and Zoning Administrator is deemed to be final, with an appeal to the Town Council available to the applicant.

- f) The applicant may appeal the Historic Preservation Commission decision on a determination of significance or a treatment plan to the Town Council within twenty (20) days of the Historic Preservation Commission decision.
- g) The Town Council shall have the right and prerogative to initiate its own review of any decision of the Historic Preservation Commission and shall uphold, modify or overrule said decision. Notice of Town Council-initiated review shall be given to the applicant within fifteen (15) days after action upon the application in question or the decision of the Historic Preservation Commission shall be deemed to be final and binding upon the Town.

f. Scenic Resources Category

i. Purpose

The Scenic Resources Category implements the Town's General Plan by providing protection for scenic corridors, public park viewsheds, and the distinctive visual character of Oro Valley. These regulations and guidelines serve to conserve views to scenic features including the ridgelines, hillsides, peaks and foothills of the Santa Catalina, Tortolita, and more distant mountain ranges that contribute to the Town's valued scenic character.

ii. Scenic Resource Conservation Areas Established

Scenic resources within the Town are identified and designated for conservation. Each scenic resource includes requirements intended to conserve the scenic qualities of the Town as observed from Oracle and Tangerine Roads. Scenic Resource Conservation Areas function to direct development design to conserve scenic views across private property.

The Oracle Road Scenic Corridor Overlay District and the Tangerine Corridor Overlay District regulations are substantively the same as the versions originally adopted in 1995 and 1997. The procedural requirements for implementing these ordinances are included in subsection B of this section.

iii. Applicability

Applicability of Scenic Resource requirements is unique to both Oracle and Tangerine Roads. Specifics for Oracle Road are provided in subsection D.3.f.vi.a.1.A of this section and Tangerine Road in subsection D.3.f.vi.b.2.A of this section.

iv. Viewshed and Vegetation Analysis

a) Viewshed Evaluation

Evaluation of scenic qualities is required for all development proposals within scenic corridors, unless expressly waived by the Planning and Zoning Administrator. Regulations may be waived if the character of the site and terrain renders such analysis as not beneficial to the Town.

Identification of views, particularly the immediate foreground of the subject property and significant background mountain views of the Catalinas, Tortolitas and Tucson Mountains, shall be undertaken for any applicable proposal, including rezonings or subdivision plats, on each development site with suggested methods for alleviating adverse visual impacts of any structure visible from applicable areas.

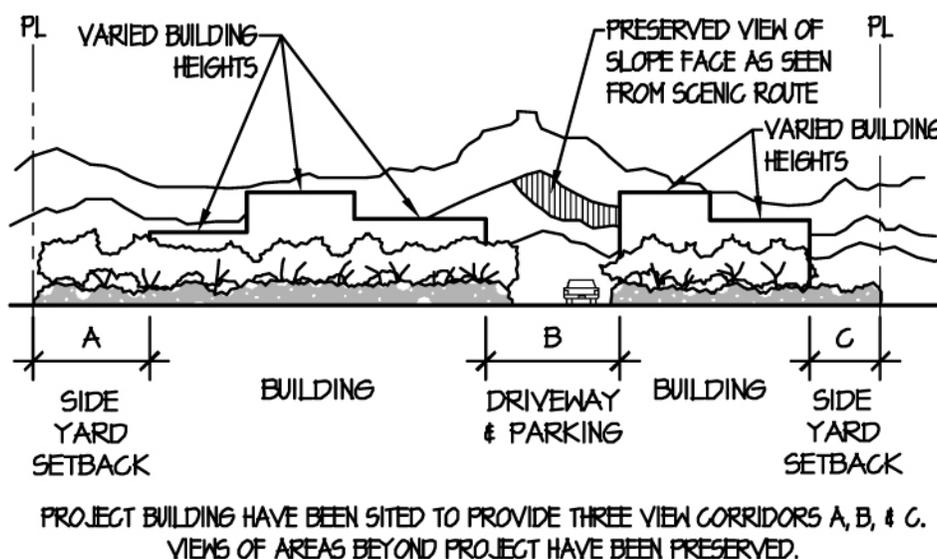
- 1) Viewshed Analysis
 - A) A viewshed analysis of vistas across the site, including any view corridors to the mountains, shall be prepared. A set of not fewer than twelve (12) different photographs, taken from the roadway frontage corners of the property and at intervals of not more than fifty (50) feet between and properly labeled, shall be submitted, as defined herein, to document existing visual resources on and across the proposed development site.
 - B) For public parks, photographs are to be taken from the approximate center of the park and from a point representing the average topographic elevation. The angle required is one looking from this point and across the proposed development site. The photo(s) shall be prepared to document existing viewshed conditions. The Planning and Zoning Administrator can require additional photographs in order to adequately document existing conditions.
- 2) View Preservation Plan (VPP)
 - A) A VPP is required for nonresidential developments with a proposed FAR (floor area ratio) of 0.2 or greater and for any developments with building heights proposed to exceed eighteen (18) feet from natural grade, existing or proposed road profile grade at the right-of-way or eighteen (18) feet above the elevation of the closest park boundary.
 - B) A narrative and viewshed analysis photographs with proposed structures superimposed on the existing landscape or accurate computer graphic renderings that depict impacts to scenic views across the site as viewed from scenic roadway corridors or public parks are required. These exhibits shall demonstrate methods for assuring that driveways, parking areas and structures are constructed in a manner compatible with the natural terrain and scenic qualities of the site.

Written and illustrative materials shall be provided by the applicant in response to the regulations and guidelines pertaining to the intended type and intensity of development. Mapping may be based on aerial photographs or base maps, with overlays if desired, prepared at an appropriate scale to illustrate the vegetation and other resources on the site, as well as proposed plans and solutions.

- i) At a minimum, written materials shall include:
 - (A) Proposed use(s) and accessory use(s).
 - (B) Building height and bulk.
 - (C) Principal building materials and colors.
 - (D) Intended architectural theme.

- ii) At a minimum, one (1) or more graphic exhibits, not less than eleven (11) inches by seventeen (17) inches in size, shall depict locations of:
 - (A) Proposed structures, drives and parking areas.
 - (B) Topography at two (2) foot intervals.
 - (C) Frontage tract and other areas where vegetation or other resources are to be preserved.
 - (D) Only lands that are visible from identified scenic resource areas, scenic corridors and public parks can be included in the protected viewshed.

FIGURE 27.10-1: VPP Graphic Exhibit Example



- b) Vegetation Identification
 - 1) Identification of corridor character vegetation (CCV) is required for all development applications within scenic corridors unless expressly waived by the Planning and Zoning Administrator.
 - 2) Corridor character vegetation (CCV) includes all saguaros or groupings of existing plants that provide visual screening, and tree species as specified below with a trunk diameter greater than six (6) inches, measured at a point two (2) feet above the ground, or a cluster of three (3) or more trees located within ten (10) feet of each other with trunk diameters of more than two (2) inches.
 - 3) Tree species included as CCV are: Blue palo verde (*Cercidium floridum*), Littleleaf palo verde (*Cercidium microphyllum*), Velvet mesquite (*Prosopis juliflora*), ironwood (*Oleaya tesota*), Desert willow (*Chilopsis linearis*), Catclaw acacia (*Acacia greggii*), Sweet acacia (*Acacia minuta*), Netleaf hackberry (*Celtis reticulata*), and Velvet ash (*Fraxinus velutina*).

- 4) Areas of distinct vegetation as defined in Native Plant Preservation, Salvage and Mitigation, Section 27.6.B, that exist within the established scenic resource conservation area are included as CCV.
- 5) Areas of distinct vegetation and CCV shall be inventoried in accordance with the requirements established in Section 27.6.B, Native Plant Preservation, Salvage and Mitigation.

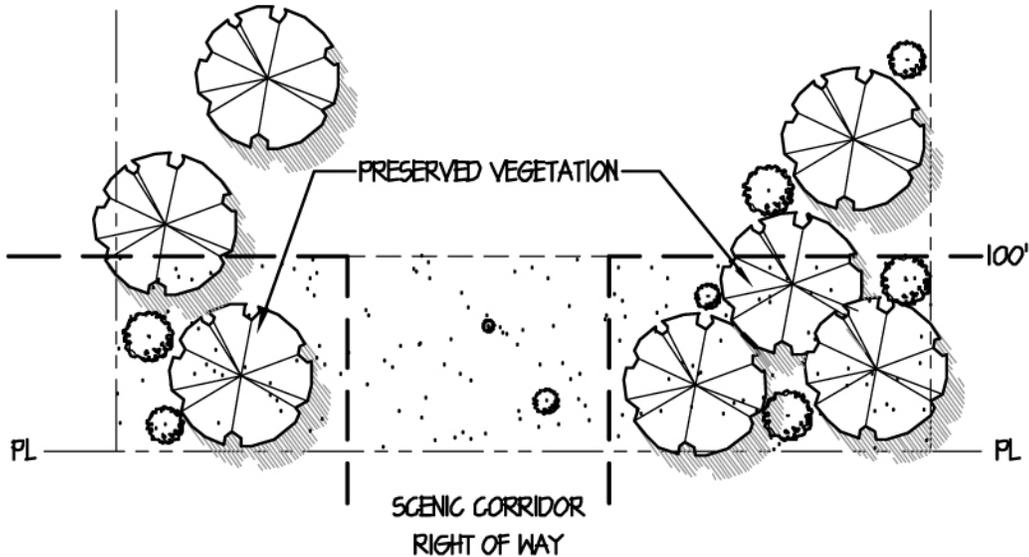
v. Vegetation and Landscape Treatment

All properties and land use categories within scenic corridors are subject to the following regulations for purposes of vegetation preservation and landscape development. Exceptions or additional requirements are noted within individual scenic corridors. These regulations and guidelines apply in addition to general Oro Valley landscape conservation requirements.

a) Vegetation Preservation Site Planning

- 1) Areas of the site where all corridor character vegetation (CCV), including under-story, is preserved are not subject to additional landscape requirements of the Oro Valley Landscape Conservation Code, Section 27.6; however, a landscape plan prepared in accordance with Section 27.6 is required. Where under-story is to be cleared or existing trees are to be trimmed, the appropriate requirements of Section 27.6, as determined by the Planning and Zoning Administrator, shall be complied with.
- 2) In cases where an area has previously been substantially disturbed or has little CCV to preserve, the landscape treatment requirements of Section 27.6.C shall apply.
- 3) Except for clearing necessary to provide utilities and access to the site, no CCV shall be removed within a distance of one hundred (100) feet from the dedicated right-of-way line of Oracle Road (Figure 27.10-2), or fifty (50) feet from the dedicated right-of-way line of Tangerine Road without prior Conceptual Design Review Board approval. No development, other than additional landscaping, is permitted within this CCV preservation zone (see subsections D.3.f.vi.a and D.3.f.vi.b of this section for additional landscaping requirements specific to land use type).
- 4) Where no CCV exists, no one hundred (100) foot or fifty (50) foot CCV preservation zone, as described above, is required. The preservation zone is required only along those frontage areas where CCV exists, as defined in subsection D.3.f.iv.b of this section.
- 5) Washes with runoff volumes greater than five hundred (500) cubic feet per second during the one hundred (100) year storm, and their associated riparian habitat, shall be preserved in their natural state with exceptions for access and utility crossings. Any wash deemed unique, based on quality of vegetation or habitat, regardless of flow rate, may be required to be maintained as natural by the Town Council.

FIGURE 27.10-2: Preserved Vegetation



b) Landscape/Screening Treatment

The following landscape requirements apply to all common areas, private and public open space, landscape buffers, medians and rights-of-way within scenic corridors, except when further than one hundred (100) feet from the Oracle Road right-of-way or fifty (50) feet from Tangerine Road and in fully screened enclosed areas such as courtyards, residential backyards and active open spaces, swimming pools and patios associated with resort and residential uses. All other Oro Valley landscape requirements and guidelines apply.

- 1) Tree species planted in landscaped areas within a scenic corridor are restricted to the following: Blue and Foothills palo verde (*Cercidium floridum* and *C. microphyllum*), mesquite (*Prosopis* spp.), and ironwood (*Olneya tesota*). All introduced shrubs, accents, and ground covers shall comply with the Oro Valley Approved Native Plant List (see Addendum C).
- 2) Parking lots shall be landscaped with the specified trees.
- 3) Decomposed granite (or other inorganic ground covers) may not exceed twenty-five percent (25%) of the total landscaped area (except roadway medians). Use of rock or stone as ground cover shall be limited to areas requiring slope stabilization or drainage channels. Only rock materials indigenous to the scenic corridor area are acceptable.
- 4) All remaining disturbed areas shall be stabilized or seeded with shrubs, wildflowers, forbes or grasses from the Oro Valley Approved Plant List as approved by the Planning and Zoning Administrator (see Addendum D).

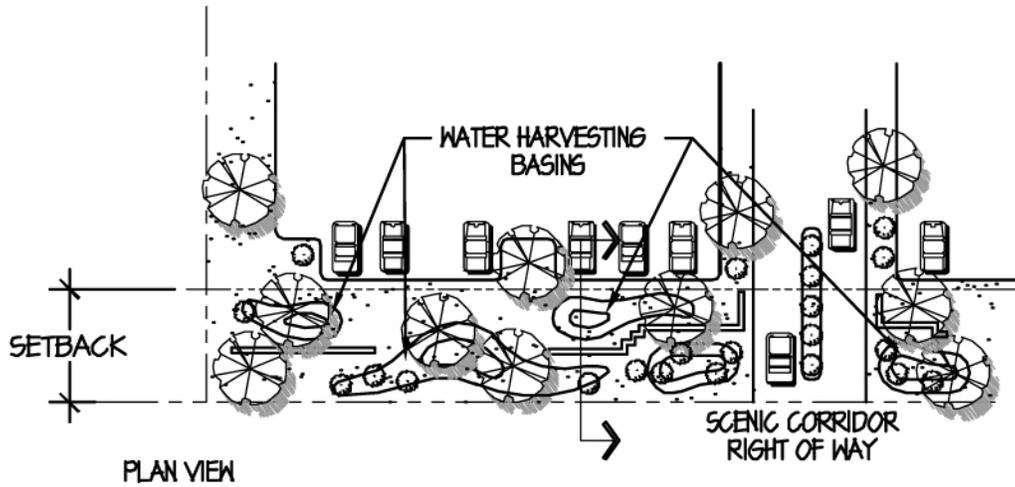
- 5) Native plant materials shall be allowed to maintain their natural form and character after establishment and during normal maintenance operations. Limited trimming is allowed for visibility and plant health purposes.
- 6) All right-of-way areas where significant vegetation does not exist shall be landscaped as established herein and in Section 27.6, with approval from the Planning and Zoning Administrator, Town Engineer, and ADOT, if within jurisdictional limits. The following additional requirements apply:
 - A) A continuous landscape treatment from the edge of the scenic corridor pavement to the right-of-way/private property line. Plant types (tree, shrubs, cactus, etc.) and quantity will be dictated by road safety standards.
 - B) Hydroseed in compliance with the quantity and type specified in Addendum D shall be utilized.

c) Walls and Berms

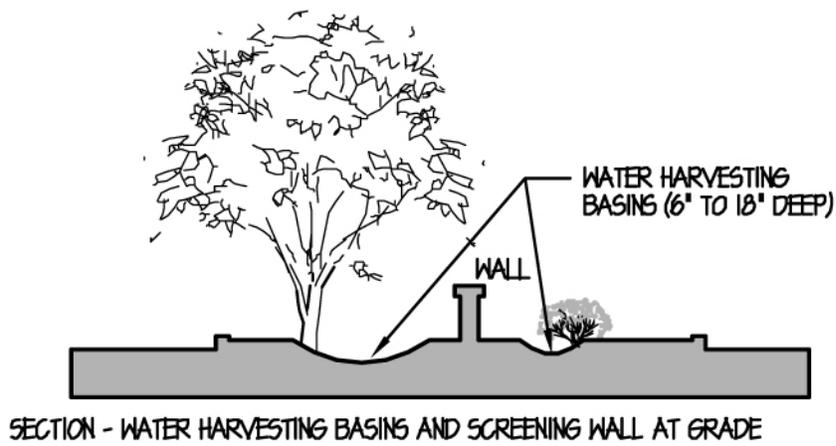
The following wall and berm requirements apply to all properties within scenic corridors.

- 1) Where existing vegetation is minimal or has been disturbed, earthen berms, or portions of earthen berms, may be placed in landscape conservation tracts for purposes of traffic noise attenuation or residential screening. Berms shall be designed in a manner to promote water harvesting and have a natural shape and appearance, complementary to the existing topography (Figure 27.10-3) and shall comply with the requirements of Section 27.6.D.4, rainwater harvesting requirements.
- 2) Walls shall not exceed in length thirty-three percent (33%) of the scenic corridor frontage of each parcel.
- 3) Fences shall be prohibited, with the exception of wrought iron fence treatments used in association with masonry walls.

FIGURE 27.10-3: Plan View and Elevations



- COMMERCIAL AND RETAIL USES
- RESIDENTIAL USES CAN USE A 5' MAX WALL HEIGHT
- WALL NOT TO EXCEED 33% OF TOTAL FRONTAGE



vi. Site Development

Oracle Road Scenic Corridor Overlay District (ORSCOD) and Tangerine Road Corridor Overlay District (TRCOD)

The sensitive natural character and scenic vistas from scenic corridors require additional development design requirements to assure scenic resource conservation and implementation of the adopted General Plan. This section includes requirements for property development along Oracle and Tangerine Roads.

a) Oracle Road Scenic Corridor District

Regulations and development guidelines adopted herein are intended to supplement the otherwise applicable zoning requirements and procedures pursuant to specific plan and overlay district enabling legislation.

1) Oracle Road Scenic Corridor District Established

A) Overlay District

The Oracle Road Scenic Corridor District, including the area designated and adopted by the Town Council as the Oracle Road Scenic Corridor Specific Plan, is hereby designated as an overlay zoning district consistent with the Oracle Road Scenic Corridor Specific Plan adopted by the Town Council. Development within the Oracle Road Scenic Corridor District shall be regulated by the provisions of this section and the requirements of the Oro Valley Zoning Code Revised, including underlying district(s) and PADs, except that in the event of a conflict, the more restrictive shall prevail.

i) Applicability

The provisions of the Oracle Road Scenic Corridor Overlay District apply to development in the area shown on the existing overlay district maps for the Oracle Road Scenic Corridor.

ii) Exceptions

- (A) Rooney Ranch Planned Area Development. The Rooney Ranch Planned Area Development contains an approved layout plan for commercial development within the Oracle Road Corridor. Area G, located on the west side of Oracle Road and south of Pusch View Lane is exempt from the provisions of this overlay zone.

Development area B of the Rooney Ranch PAD is exempt from the following provisions: subsection D.3.f.vi.a.3.B.i and ii of this section (front setbacks) and subsection D.3.f.vi.a.3.B.iii of this section, building bulk. Development area D is exempt from all provisions of this overlay zone except, subsection D.3.f.v.b.6 of this section, right-of-way landscaping.

- (B) La Reserve Planned Area Development. All portions of the La Reserve PAD that fall within the Oracle Road Corridor Overlay District are subject to the provisions of the district, with the exception of the Foothills Business Park. Based on the recorded plat for the Foothills Business Park, Lots 2 through 8, 16, and 17 shall be exempt from the requirements of subsection D.3.f.vi.a.3.C.iv of this section (open space) and subsection D.3.F.vi.a.3.C.v of this section (view corridors). Lots 9

through 12 of the Foothills Business Park shall be exempt from the provisions of subsection D.3.f.vi.a.3.C.ii of this section (setbacks) and subsection D.3.f.vi.a.3.C.iv of this section (open space). All other provisions of this district shall apply. Lots 1, 13, 14, and 15 of the Foothills Business Park have been fully developed, and are exempt from the provisions of the Overlay District.

(C) Steam Pump Village Planned Area Development. The Steam Pump Village PAD is exempt.

(D) If any PAD is substantially changed from the Town approved plan, as determined by the Planning and Zoning Administrator, all provisions of this Overlay District shall apply. A substantial change from the approved land use plan includes a change in (1) the number and general massing of buildings or groups of buildings, (2) density, (3) setbacks, (4) open space or (5) circulation configuration. Such a deviation will cause the loss of exemption. All cases evaluated for significant change shall be made known to the Planning and Zoning Commission through the Planning and Zoning Administrator's report.

B) Special Recommendations

The Planning and Zoning Administrator may recommend such development requirements as the Administrator deems necessary to assure compliance with Oracle Road Scenic Corridor Specific Plan Goals and Objectives and for the protection of neighboring residences for all plats and site plans that may be submitted in the development period.

2) Approvals Required

No structure or building shall be built or remodeled on land in the Oracle Road Scenic Corridor District until approval has been granted as set forth in this section and as required in other applicable sections of this Zoning Code.

3) Oracle Road Scenic Corridor District Use

Distinctions in development regulations are applied to four (4) general types of land use (Residential, Resort, Commercial, Employment/Institutional) for their effective integration into the unique scenic corridor setting.

A) Residential Development Regulations

The Oracle Road Scenic Corridor Specific Plan and the Oro Valley General Plan characterize the plan area's predominant land use character as being resort-residential in nature. Accordingly, additional assurances and criteria are set forth to protect scenic quality and to protect and enhance residential character within the corridor. Zoning district requirements shall pertain except as herein provided for properties, or portions thereof, classified according to Sections 23.6 and 23.7, Single-Family and Multi-Family Residential District Regulations, and located within the Oracle Road District.

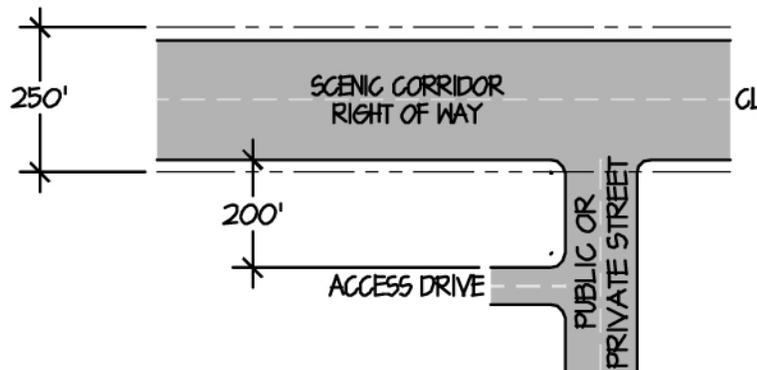
i) Access to Oracle Road. Direct access to Oracle Road is permitted only for pre-existing, residentially zoned lots of record as of the effective date

of the Oracle Road Scenic Corridor Overlay District. Thereafter, subdivisions or residential clusters containing a minimum of forty (40) residential lots or dwelling units shall have access points spaced a minimum of six hundred sixty (660) feet on center, except as hereinafter required or modified by specific plan variance.

Indirect access to Oracle Road, by way of a dedicated public street or by private street observing the aforementioned spacing requirement, is required, as feasible, to any residence or residential development from a point not less than two hundred (200) feet from the Oracle Road right-of-way.

- ii) Required Setbacks. Setback requirements of the applicable zoning district are to be provided and, except for residentially zoned lots existing prior to the adoption of the ordinance codified in this section, a peripheral landscaped setback, exclusive of access driveways, is to be designated as common area to a depth of not less than thirty (30) feet from the front and rear property lines.

FIGURE 27.10-4: Residential Indirect Access Design



- iii) Density. Within perimeter setbacks and view corridor restrictions, the setbacks, heights, coverage, density, and open space requirements of the underlying residential district apply to individual lots or dwelling clusters.
 - iv) Height. Structures within one hundred (100) feet of the Oracle Road right-of-way may not exceed eighteen (18) feet in height.
 - v) Landscaping Treatments. Landscaping is to be installed and maintained for perimeter setbacks and all common open space areas according to an approved phasing schedule. Further requirements are applied:
- B) Resort Development Regulations

The Oracle Road Scenic Corridor Specific Plan and the Town of Oro Valley General Plan designate the corridor as being resort-residential in character. Accordingly, resort development is encouraged for its poten-

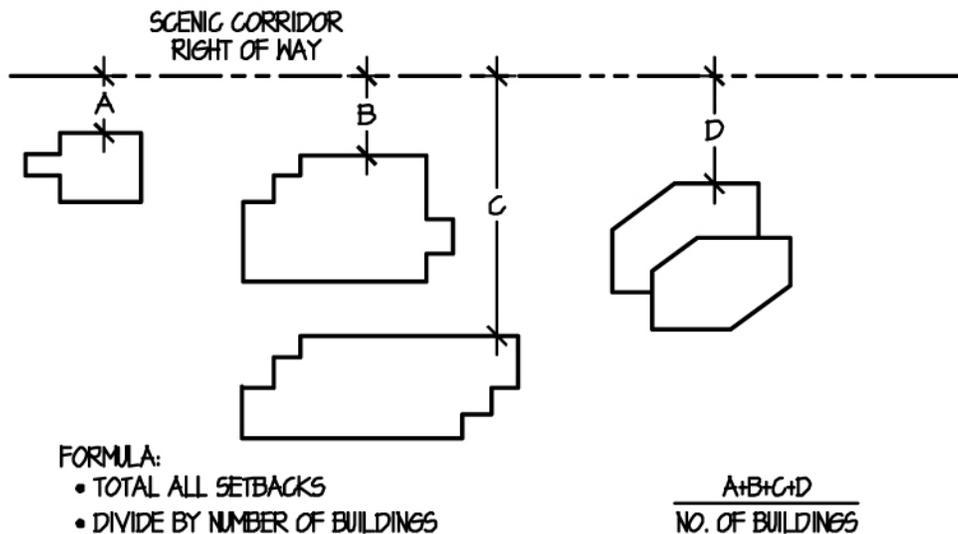
tial contribution to the recommended use characteristics and scenic qualities of the corridor.

- i) Access to Oracle Road. Resort development requires a minimum frontage of six hundred sixty (660) feet on Oracle Road, with a single roadway access (unless frontage exceeds two thousand (2,000) feet or as may be required for emergency access). The entry drive or street is to be a minimum of two hundred (200) feet in length from the Oracle Road right-of-way to any intersecting interior drive.
- ii) Required Setbacks. A setback of not less than one hundred fifty (150) feet from the Oracle Road right-of-way is to be provided, the front one hundred (100) feet of which shall be landscaped or natural open space. Where adjacent to existing residential development, buffers of three hundred (300) feet are required as side or rear setbacks, which may be used for parking if properly screened.
- iii) Density/Bulk. Subject to Planning and Zoning Commission approval, resort/residential developments proposed in the Oracle Road Scenic Corridor Overlay District shall consist of contiguous land areas totaling seven and one-half (7 1/2) acres or more.
 - (A) A qualifying resort is to contain a minimum total of thirty (30) guest rooms, casitas, and/or dwelling units, of which the majority are to be located within the principal structure.
 - (B) Subject to Town Council approval, additional guest rooms or dwelling units may be constructed in excess of those determined from gross land area as specified in Section 23.7.C.1.
- iv) Landscaping Treatments. Not less than twenty-five percent (25%) of the gross site area is to be devoted to common landscaped or natural open space recreation areas accessible to resort guests and homeowners.
- v) View Corridors. Buildings over eighteen (18) feet in height or other structures, including walls, signs or mechanical equipment over four (4) feet in height, may not be placed within one hundred (100) feet of the Oracle Road right-of-way, with the following exceptions:
 - (A) Resort signage; principal resort structure two hundred (200) feet or more from the right-of-way.
 - (B) Retaining walls for screened parking areas.
- vi) Performance Requirements. All other development requirements of the R4-R district, as well as the requirements of this section, shall apply.
- C) Commercial Development Regulations

The Oracle Road Scenic Corridor Specific Plan requires additional assurances with regard to the design and placement of commercial structures or uses so as to protect the scenic qualities that accrue to the value of all properties within the corridor. Zoning district requirements apply except as herein provided for properties, or portions thereof, classified according to Section 23.8, commercial district regulations, as C-1, C-N, C-2 or P-1 Districts, located within the Oracle Road District.

- i) Access to Oracle Road. Direct access to Oracle Road is to be spaced a minimum of three hundred thirty (330) feet on center, except as herein-after required or modified by Specific Plan variance.
- ii) Required Setbacks. Setback requirements of the applicable zoning district classification are applied, except as provided below:
 - (A) Front setback for multiple structure development: Average one hundred twenty (120) feet.

FIGURE 27.10-5: Setbacks



- (B) Front setbacks for single structure development: Minimum sixty (60) feet and must comply with a four to one (4:1) setback to building height ratio.
- (C) Side setback distances of the applicable zoning district are to be provided.
- (D) Office developments on parcels of two (2) acres or less and not exceeding five thousand (5,000) square feet of gross leasable area shall be permitted to observe the adjacent residential setback plus ten (10) feet for buildings up to two thousand (2,000) square feet; and for buildings of two thousand (2,000) to five thousand (5,000) square feet in area, one and one-half (1 1/2) times the residential setback. Half of the additional requirement (in excess of the residential district setback) shall be waived where all parking is provided with security concerns addressed or internalized parking; half shall be waived for single-story structures of fifteen (15) feet in height or less.

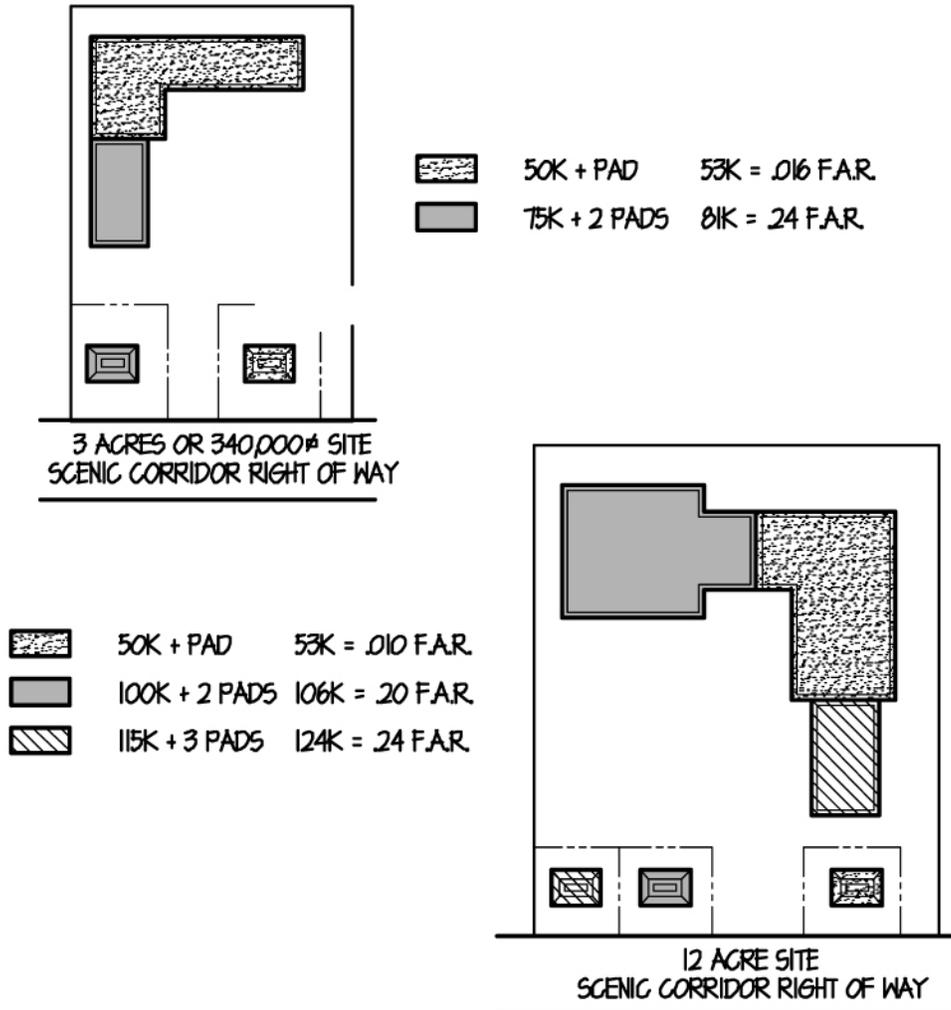
Examples:

Building up to two thousand (2,000) square feet, adjacent to R1-36: forty (40) foot rear setback plus ten (10) feet equals fifty (50) feet; may be reduced in increments of five (5) feet to forty (40) feet.

Building two thousand (2,000) to five thousand (5,000) square feet adjacent to R1-43: twenty (20) foot side setback times one and one-half (1 1/2) equals thirty (30) feet; may be reduced in increments of five (5) feet to twenty (20) feet.

- iii) Freestanding Building Pads. Within development envelopes established by setbacks and view corridor restrictions, the following freestanding pads may be built:
 - (A) Establishment of freestanding building pads fronting on or directly accessible from Oracle Road is permitted only on sites of five (5) acres or greater, with a minimum of fifty thousand (50,000) square feet of GFA (gross floor area) in the principal structure required for the first such pad. Additional pads, requiring further increments of principal building GFA, may be permitted only by express Planning and Zoning Commission approval, subject to the following requirements:
 - (1) Properties not exceeding ten (10) acres in area shall provide an additional twenty-five thousand (25,000) square feet of GFA or portion thereof for each additional pad requested; or
 - (2) Properties of greater than ten (10) acres in area shall provide an additional fifty thousand (50,000) square feet of GFA or portion thereof for each additional pad requested.
 - (3) All convenience uses shall comply with Section 25.1.G.

FIGURE 27.10-6: Freestanding PAD illustrations

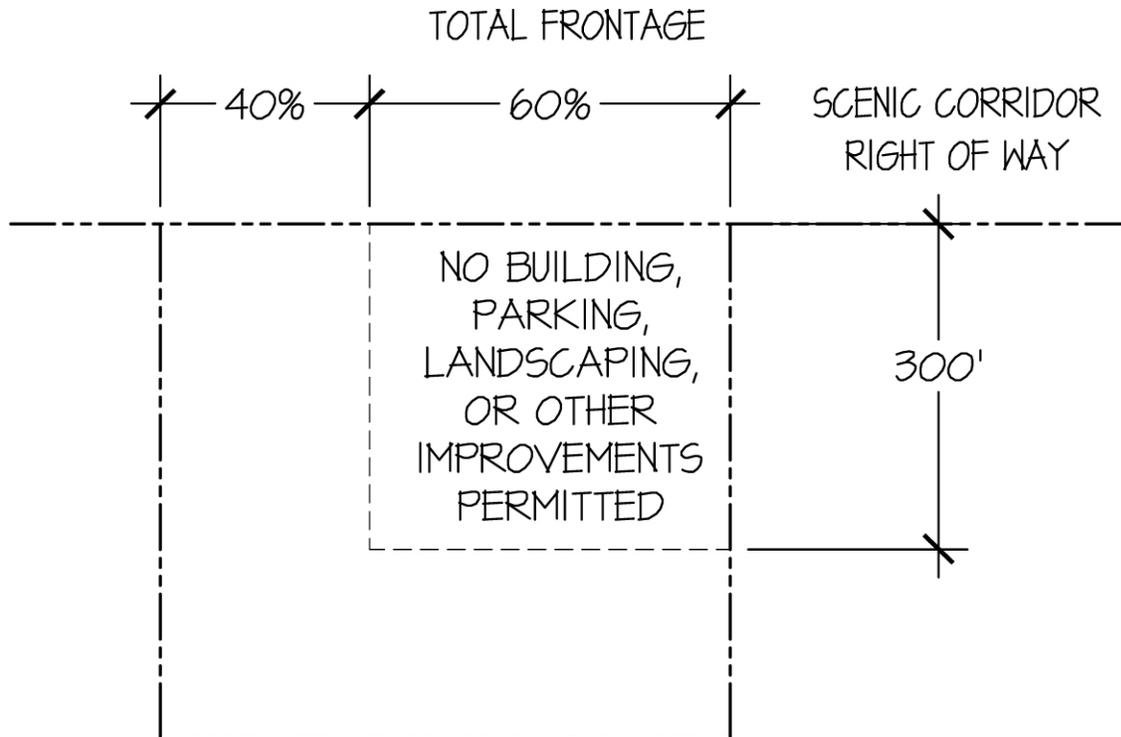


- (B) Allowable building area is 0.25 FAR for sites with an area of two (2) acres or larger; reduced by fifty percent (50%) (0.125 FAR) for sites or existing freestanding pads of lesser area. FAR may be increased, to a total not exceeding 0.3 FAR, by the following site plan features:
- (1) An additional 0.01 FAR shall be permitted for each ten percent (10%) (or fraction thereof) over eighty percent (80%) of total building volume in the rear half of the site; a 0.03 FAR increment shall be permitted for placing the total building bulk in the rear half of the site.
 - (2) Principal buildings which are oriented perpendicular to Oracle Road, observing a ratio of one to three (1:3) or greater of proportionate facade parallel to Oracle Road, shall be permitted an additional 0.01 FAR.

- (3) Double-fronted principal structures, with landscaped, architecturally designed entrances on two (2) opposing sides, shall be permitted an additional 0.01 FAR.
- iv) Landscaping Treatments. Approved landscaping is to be installed and maintained prior to the issuance of a certificate of occupancy, subject to the following:
 - (A) Freestanding building pads require approved landscape plans consistent with areas maintained as natural open space.
 - (B) All areas other than those covered by buildings or paving for required parking and maneuvering are to be landscaped or maintained in their undisturbed natural desert condition.
- v) View Corridors. The applicant shall be responsible for identifying view corridors as provided in subsection D.3.f.iv of this section. Flexibility from the view corridor requirements defined below shall be determined by express approval of the Planning and Zoning Commission.
 - (A) The following requirements are applied to the east and west sides of Oracle Road as follows:
 - (1) West Side

No building heights over eighteen (18) feet or structures, including walls, signs, or mechanical equipment over four (4) feet in height, within a minimum of sixty percent (60%) of the frontage to a depth of three hundred (300) feet is maintained as a view corridor.
 - (2) East Side
 - (a) A minimum of sixty percent (60%) of the frontage to a depth of three hundred (300) feet is maintained as a view corridor (Figure 27.10-7) and is not used for building purposes. Total building exposures or frontages will be measured to calculate the view corridor open area percentage.
 - (b) Properties with an average depth of four hundred (400) feet or less, or containing less than two (2) acres in size, building heights in excess of twenty-five (25) feet (as permitted by underlying zoning) shall be limited to forty percent (40%) of the frontage. The remaining buildable area heights shall be limited to twenty-five (25) feet.

FIGURE 27.10-7: View Corridor Illustration



- (c) Landscaping, walls, or other improvements installed by the developer within or adjacent to view corridors require express Conceptual Design Review Board approval.
 - (d) No signage, wall, or other structure may be placed so as to obstruct defined view corridors, except as provided for above.
 - (e) No structure or appurtenance may project above ridgelines; all development must blend with the background slope as established in the applicable Scenic Resource Area design guidelines.
- (D) Employment/Institutional Regulations
- Campus developments on larger sites are especially desirable for preserving view corridors, adding variety to the specific plan area and creating activity balance with in-community destination sites. Special attention is required to maintain the corridor's structural scale and efficient traffic management. Zoning district requirements apply, except as hereinafter provided, for properties classified under Sections 23.8.E, Private Schools (PS), and 23.8.F, Technological Park (T-P) Districts and located within the Oracle Road Scenic Corridor District.
- (i) Access to Oracle Road. Campus uses require a minimum frontage of six hundred sixty (660) feet on Oracle Road or other arterial streets, with roadway access located so as to be at least three hundred (300) feet from an established entry point to an adjacent property or street:

- (A) Multiple entries may be required if traffic projections for the proposed use so warrant.
- (B) Signalization, at appropriate spacing, is permitted only if warranted according to Arizona Department of Transportation criteria.
- (ii) Required Setbacks. A setback of not less than one hundred fifty (150) feet from the Oracle Road right-of-way is to be provided, the front one hundred (100) feet of which shall be landscaped or natural open space.

Natural open space or landscaped buffers (which may include natural washes) of not less than one hundred (100) feet in width are required as side or rear setbacks to any adjacent residential district.

- (iii) Density/Bulk. Development intensity for institutional or employment campus uses is limited to a maximum of 0.3 FAR and may be further limited by the Town Council.
- (iv) Landscaping Treatments. Not less than twenty-five percent (25%) of the gross site area is to be devoted to common landscaped or natural open space recreation area.
- (v) View Corridors. The applicant shall be responsible for identifying view corridors as provided in subsection D.3.f.iv of this section.
 - (A) Along the west side of Oracle Road, buildings over eighteen (18) feet or other structures, including walls, signs or mechanical equipment over four (4) feet in height, may not be placed within one hundred fifty (150) feet of any identified view corridor without express Conceptual Design Review Board approval.
 - (B) Along the east side of Oracle Road, a minimum of sixty percent (60%) of the frontage to a depth of three hundred (300) feet along the east side of Oracle Road is maintained as a view corridor and is not used for building purposes. Building exposures will be measured to calculate the view corridor percentage. For properties along the east side of Oracle Road, with an average depth of four hundred (400) feet or less, or containing less than two (2) acres in size, building heights in excess of twenty-five (25) feet (as permitted by underlying zoning) shall be limited to forty percent (40%) of the frontage. The remaining buildable area heights shall be limited to twenty-five (25) feet.
- E) Commercial Retail Intensity

An increase to the intensity of commercial retail use of a specific parcel shall require a conditional use permit in accordance with Section 22.5.

b) Tangerine Corridor Overlay District

1) Tangerine Corridor District Regulations

The provisions herein are adopted as supplements to the applicable zoning requirements of the underlying zoning district classifications. Regulatory provisions, including standards and measurements, are mandatory.

2) Tangerine Corridor District

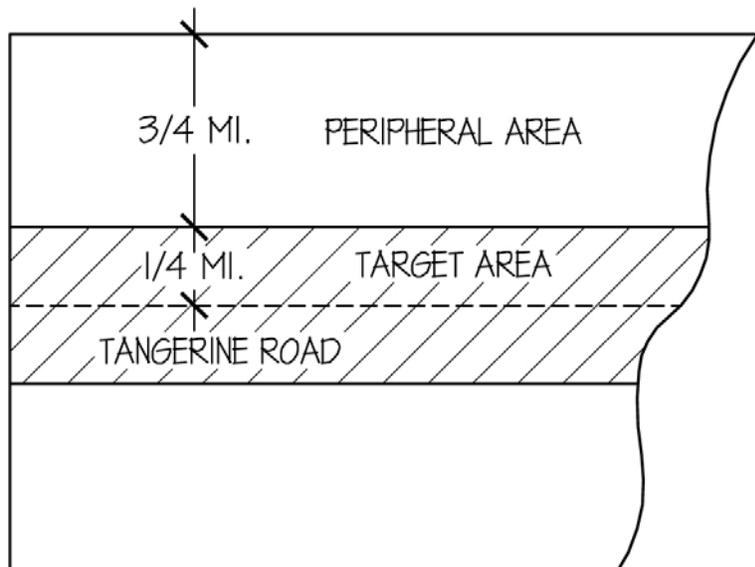
The Tangerine Corridor District is an overlay district to provide implementation directions for the Tangerine Road Corridor Specific Plan, which has been duly adopted as a refinement of the Town of Oro Valley General Plan. The purpose of these regulations and guidelines is to preserve the value of lands possessing the unique Upper Sonoran Desert character found within the Tangerine Road Corridor, as well as to protect the health, safety, and welfare of the public by encouraging reasonable use and enjoyment of private property. It is the further premise of this section that attention to the corridor's environmental quality is necessary to maintain a natural coexistence with the desert that enhances the value of all lands with it.

A) Overlay District

The District shall include lands located between Naranja Road and Moore Road, or their alignments, within the corporate limits of the Town of Oro Valley (the "corridor"); and shall be applied to all properties lying within the corridor at the time of adoption of this ordinance codified in this section; and to such lands within the corridor which may, from time to time, be annexed into the Town.

- i) Applicability. Overlay district regulations, as stated herein, apply to all property within one-quarter (1/4) mile of the Tangerine Road centerline (the "target area," as defined in the Tangerine Road Corridor Specific Plan). Overlay district guidelines pertain to all uses in the corridor. Construction, addition to or remodeling of individual residences within the target area shall require only observance of frontage tract and setback requirements and of nonaccess provisions.

FIGURE 27.10-8: Target Area Illustration



- ii) Exceptions. Site plans, preliminary plats, or final plats approved prior to the adoption of the ordinance codified in this section and still in effect, and individual residences on single lots, are exempt from the requirements of this section.
- (A) The adopted Rancho Vistoso PAD, having addressed, met or exceeded certain requirements of this Overlay District, is exempt from the following requirements of this section: subsection D.3.f.vi.b.4.A.i of this section; and subsections D.3.f.vi.b.5.A.ii, A.v, B.iii, and B.vii.C.3 of this section, except that the allowances of subsection D.3.f.vi.b.5.B.iii.B of this section shall be applicable.
- (B) The adopted Rancho Vistoso PAD design guidelines shall prevail, where they conflict with the guidelines in subsection D.3.f.vi.c of this section. However, large expanses of glass or other materials of high reflectivity should not be used. In addition, residential developments, which may be impacted by noise from Tangerine Road, should include the noise mitigation provisions of subsection D.3.f.vi.c of this section.
- B) Conformance to General Plan

The Overlay District is intended as a refinement to the Oro Valley General Plan, in the form of a regulatory specific plan with additional design guidelines. All development hereunder is required to be consistent with the General Plan. It is, however, expressly intended that residential densities or intensities of development may be averaged or clustered, with Town approval on any property where such siting has the effect of further separating development from Tangerine Road or from sensitive natural or cultural resources.

Any conflicts arising as a result of amendments to the General Plan, Tangerine Road Corridor specific plan, or the text provisions of applicable, underlying zoning districts shall be resolved in favor of the General Plan, unless interpreted otherwise in this section.

- C) Conformance to Specific Plan

Evaluations of site plans by the Conceptual Design Review Board should result in findings and/or recommendations that are consistent with the Tangerine Road Corridor Specific Plan.

- 3) Application Requirements

Any application for land improvement within the Tangerine Road Corridor Overlay District target area, or where specifically required elsewhere in the corridor, shall be submitted for development review; and, in the case of nonresidential site plans, planned area development, subdivision plats or other site plans, shall be submitted in a form and in such numbers as required by the official responsible for accepting the application.

Special Consideration

The application shall be accompanied by a statement with justification, describing any requested waiver, such as exemption from visual analy-

sis or increased building height; or adjustment to otherwise applicable criteria, such as master planned developments flexibility.

4) Tangerine/Arterial Frontage Tracts

As a means to assure safety through unimpeded traffic visibility with minimal distraction, separation of travel modes, adequate stormwater drainage and other recommended traffic engineering improvements, tract reservations in the nature of nonbuildable, nonaccess easements are required adjacent to all property lines abutting Tangerine Road or other arterial roadway rights-of-way in the corridor Target Area. The intent is to severely restrict direct access onto Tangerine Road or intersecting arterial (within a specified distance from Tangerine); encouraging, instead, well-separated side arterial access and internal loop circulation. These tracts serve the further purposes of providing additional buffering from transportation facilities, preserving vegetation essential to the corridor's character and enhancing the value of private property.

All developments shall be responsible for reserving and maintaining tracts, as specified herein, adjacent to the property lines abutting Tangerine Road and arterial roadway frontage within a distance of six hundred sixty (660) feet from the Tangerine Road right-of-way, unless otherwise specified.

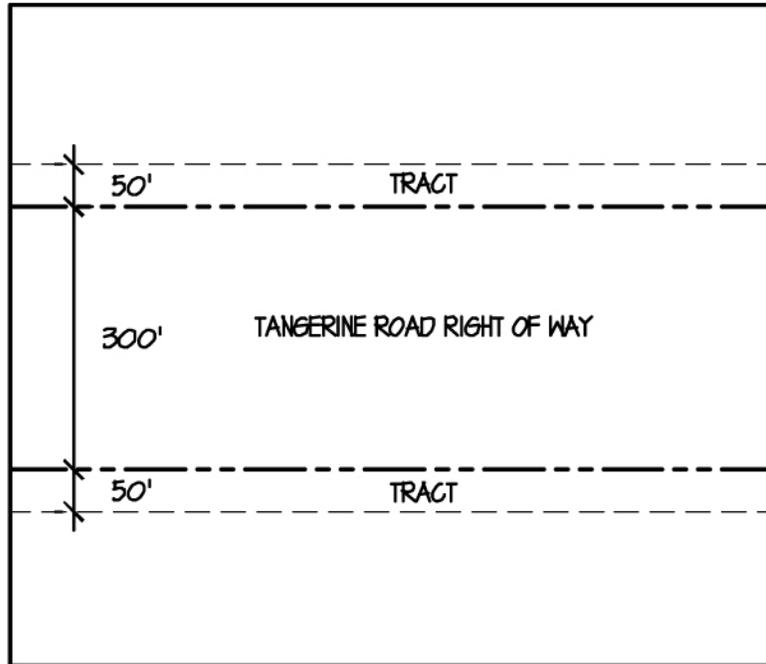
A) Nondevelopment or Conservation Easements

The widths of tracts to be provided are as follows:

i) Tangerine Road

A tract of not less than twenty-five (25) feet in width for commercial developments located at arterial intersections and fifty (50) feet in width for all other developments shall be designated on all properties abutting Tangerine Road, measured from the right-of-way. Crossing of the tract with roads, public or private, and driveways (except for emergency vehicle access where required) is prohibited without the approval of ADOT and the Town, and in no case shall such direct access crossing be less than three hundred thirty (330) feet from an arterial intersection or less than one thousand (1,000) feet from another vehicular tract crossing.

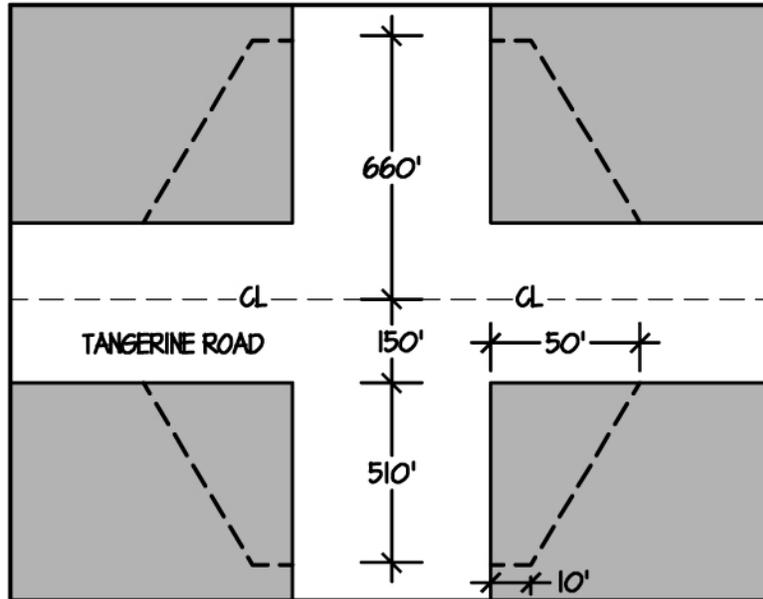
FIGURE 27.10-9: 50 Foot Tract along Tangerine Road R-O-W



ii) Arterial Roads

A tract not less than fifty (50) feet in width beginning at the point of intersection with the corresponding Tangerine Road tract and tapering to a width of not less than ten (10) feet at a point six hundred sixty (660) feet from the Tangerine Road centerline shall be designated on all properties abutting arterials in the target area, measured from the arterial right-of-way. Under special circumstances, such as restricted parcel dimensions, improved structural massing or uneven topography, ADOT and the Town may approve reduction of the tract to not less than three hundred thirty (330) feet in length and twenty-five (25) feet in width at the Tangerine tract. Crossings of arterial tracts are prohibited.

FIGURE 27.10-10: Tangerine Road Crossings



iii) Signage Permitted

Signs are permitted within the tract in accordance with Chapter 28, Signs.

iv) Pathway Linkages

Locations for trails or paths may be approved for placement within the reserved area.

B) Berms

Where existing vegetation is minimal or has been disturbed, earthen berms, or portions of earthen berms, may be placed in frontage tracts for purposes of traffic noise attenuation or screening requirements.

Berms must be designed in a manner to ensure compliance with water harvesting requirements in Section 27.6.

C) Drainage Facilities

Natural materials, such as river rock and vegetative groundcover, shall be required for lining drainage structures placed on reserved tract areas unless other materials are approved by the Planning and Zoning Administrator and the Town Engineer. All such drainage structures shall be designed and installed to accommodate ultimate roadway design plans.

D) Utility Easements

Provisions for utilities may be included in separate easements within the frontage tract upon approval of the Town. Utility providers shall be required to keep disturbance of natural vegetation to a minimum during the installation or maintenance of their facilities and to restore vegetation in a manner consistent with requirements for adjacent property owners. Future aboveground power lines carrying 46 kV or less are subject to conditional use permit (CUP) approval and the criteria specified in Section 22.5. A CUP may be conditioned to require undergrounding of power lines with a specified time frame or concurrent with specific projects. Site plans for properties abutting arterial intersections shall provide conduit for future intersection lighting requirements.

5) Tangerine Road Corridor Overlay District Use Provisions

General types of land use as anticipated for the corridor in the Oro Valley General Plan (residential, commercial, employment/institutional) are provided additional distinctions for their applicability in conjunction with underlying zoning district use regulations. Resort or other nonresidential uses not covered by these provisions may be considered in accord with commercial regulations. The Overlay District, in requiring the reservation of frontage tracts, subsection D.3.f.vi.b.4.A of this section, carries further expectation that existing vegetation shall be preserved or otherwise be revegetated with specimens from the disturbed areas on the subject site to maintain native plant material along all Tangerine Road property lines. Pathway linkages are to be provided within each development and connecting with pathways, trails or bike lanes paralleling or otherwise linking to Tangerine Road.

A) Residential Development Regulations

Construction in any residential zoning classification shall comply with the following provisions in addition to the applicable regulations of the underlying zoning district:

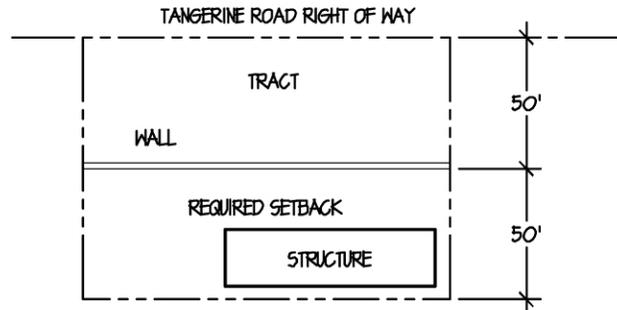
i) Roadway Access

Direct access to Tangerine Road or to an intersecting arterial roadway within six hundred (600) feet of the Tangerine right-of-way is prohibited for any future development without the express approvals of the Town and ADOT (see subsections D.3.f.vi.b.4.A.i and ii of this section). The intent is to eliminate curb cuts from Tangerine Road's parkway improvements, affording access only from streets intersecting with Tangerine or approved circulation roadways and/or frontage roads provided with acceleration/deceleration lanes accessing the major roadway.

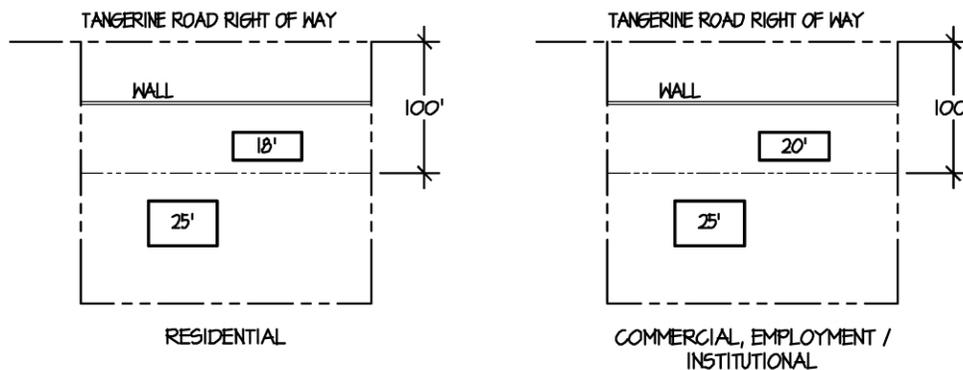
ii) Required Setbacks

Setback requirements of the applicable, underlying zoning district shall be provided in addition to the reserved easement tract. Undulating setback distances may be approved in planned developments to provide variety and visual interest.

FIGURE 27.10-11: Tangerine Road Easements and Structure Heights



- RESIDENTIAL STRUCTURE HEIGHT NOT TO EXCEED THE LESSER OF 18' OR THE APPLICABLE ZONING DISTRICT HEIGHT.
- COMMERCIAL, EMPLOYMENT / INSTITUTIONAL STRUCTURE HEIGHT NOT TO EXCEED THE LESSER OF 20' OR THE APPLICABLE ZONING DISTRICT HEIGHT.



iii) Density

Coverage, density, and open space requirements of the underlying zoning district shall apply to individual lots or dwelling clusters.

- (A) Lots including frontage tracts are entitled to include the tract area in meeting these requirements.
- (B) Planned residential developments may compute perimeter tracts for open space and dwelling unit density yield.
- (C) Minimum lot areas of the applicable residential zoning district may be reduced by as much as twenty percent (20%) for lots clustered in the interior of the development to take advantage of frontage tract area reservations. Further reductions may be permitted with provision of environmentally sensitive open space (ESOS) as provided in subsection F.2 of this section.
- (D) No lot of reduced area, however, may be sited adjacent to a residence existing at the time of platting.

iv) Perimeter Screening Walls and Berms

Screening is required for traffic noise attenuation and residential privacy. Residential developments abutting Tangerine Road shall provide a solid, masonry wall five (5) feet or greater in height, which structure may be constructed to a height of eight (8) feet with engineering approval. Walls shall not be constructed within nondevelopment or conservation easements. Earthen berms may be substituted for, or alternated with, walls to a height not less than five (5) feet from natural grade. Berms must be designed in a manner to ensure compliance with water harvesting requirements in Section 27.6.D.

v) Building Height

Structures within one hundred (100) feet of, and visible from, the Tangerine Road right-of-way shall not exceed eighteen (18) feet in height; except, where the natural grade of the structure's site is below that of Tangerine Road's proposed profile grade, the structure may be built to the lesser of eighteen (18) feet above the proposed roadway grade or the maximum height of the applicable zoning district.

B) Commercial Development Regulations

The sensitive natural character of the Tangerine Road Corridor, coupled with the community's desire for economic development on specified, master planned and strategically located sites, requires additional assurances with regard to the design and placement of commercial uses. Construction in any commercial zoning classification shall comply with the following provisions in addition to the applicable regulations of the underlying zoning district:

i) Roadway Access

Access provisions of subsection D.3.f.vi.b.5.A.i and D.3.f.vi.b.5.A.ii of this section shall apply. Internal loop circulation roadways, with access/egress points observing the desired spacing and providing additional turning lanes, shall be provided.

ii) Required Setbacks

Setback requirements of the applicable underlying zoning classification are applied, except that the front setback from Tangerine Road, including the reserved tract, shall be not less than a four to one (4:1) setback to building height ratio.

iii) Building Height

Structures within one hundred (100) feet of, and visible from, the Tangerine Road right-of-way shall not exceed twenty (20) feet in height.

(A) Except, however, where the natural grade of the structure's site is below that of Tangerine Road's proposed profile grade, the structure may be built to the lesser of twenty (20) feet above the proposed roadway grade or the maximum allowable height of the applicable zoning district.

- (B) Architectural features, such as decorative bell or clock towers, campaniles, carillons and spires, of a size proportional to the building they embellish shall be exempted from the four to one (4:1) setback ratio and this height restriction to the maximum allowable height of the applicable zoning district upon compliance with the view preservation plan requirements of subsection D.3.f.iv of this section.

- iv) Building Bulk

The following structural volumes may be built within the development envelopes established by required setbacks: 0.3 FAR for sites with an area of two (2) acres or larger; reduced by fifty percent (50%) (0.15 FAR) for parcels or freestanding pads of lesser area.

- v) Land Use Distinctions

Uses permitted in the underlying zoning districts, as determined by the Planning and Zoning Administrator, shall be permitted except that the following may be sited only within master planned commercial developments (such as the Rancho Vistoso PAD or Forest City sites, as indicated on the future site plan, or future commercial PADs) on parcels two hundred (200) feet or more from the development's nearest entry point:

- (A) Building or home improvement supplies;
- (B) Plant nurseries;
- (C) Indoor theaters.

- vi) View Preservation

All properties required to submit a visual analysis will develop in accord with the View Preservation Plan as provided in that analysis.

- vii) Site Planning

Additional site plan review criteria applicable to Tangerine Corridor commercial properties include:

- (A) Interior calculation shall include maneuvering aisles, access for deliveries and trash pick-up and pedestrian connections. Sites of twenty (20) acres or greater shall have entry road designs that prohibit cross traffic within two hundred (200) feet of the entry point.
- (B) The proposed location of all trash receptacles, heating, ventilating, and air conditioning equipment, loading and parking areas shall be screened from public view.
- (C) Employment and Institutional Regulations

Sites for campus-type developments are established within the Tangerine Corridor's natural context to create unique, unobtrusive opportunities for employment and institutional activity centers. Construction shall comply with the following provisions in addition to the applicable regulations of the underlying zoning district.

(1) Roadway Access

Access provisions of subsection D.3.f.vi.b.5.A.i and D.3.f.vi.b.5.A.ii of this section apply; however, multiple access points from Tangerine Road may be appropriate for institutional developments exceeding twenty (20) acres in area, which experience high peak hour traffic demand. Construction of a public roadway perpendicular to Tangerine, separated by not less than one-quarter (1/4) mile from any arterial intersecting Tangerine, may be approved for the purpose of providing multiple entries to the campus. Secondary, alternative access to an intersecting arterial is also desirable.

(2) Required Setbacks

The commercial development regulations, subsection D.3.f.vi.b.5.B.ii of this section, shall also apply.

(3) Building Height

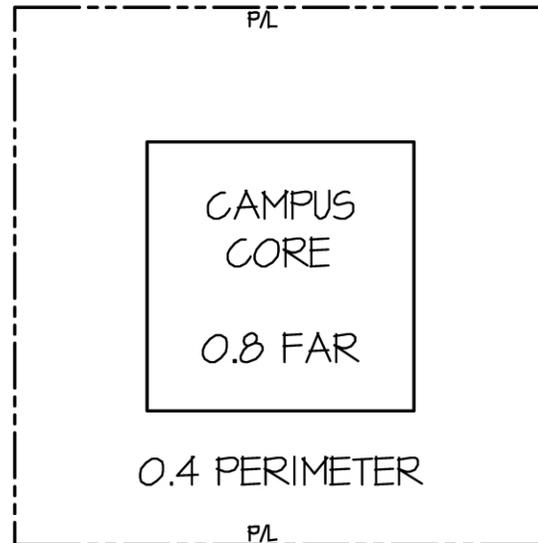
The commercial development regulations, subsection D.3.f.vi.b.5.B.iii of this section, shall apply.

(4) Building Bulk

The following structural volumes may be built within the development envelopes established by required setbacks:

- (a) The overall campus building area shall not exceed the FAR for the appropriate zoning district.
- (b) Buildings within the campus core (an area representing one-quarter (1/4) or less of the total site area surrounded by an equidistant peripheral band with lesser or no structural development; see Figure 27.10-12) shall not exceed 0.8 FAR.
- (c) Building area within peripheral area shall not exceed 0.4 FAR or the FAR for the appropriate zoning district, whichever is less.

FIGURE 27.10-12: Allowable FAR using Campus Core



(5) Land Use Distinctions

Uses permitted in the underlying zoning districts as determined by the Planning and Zoning Administrator shall be permitted except that the following may be sited only within master planned institutional or employment developments at a distance of two hundred (200) feet or more from the development's nearest entry point:

- (a) Office buildings exceeding two (2) stories or thirty (30) feet in height.
- (b) Research, fabricating or manufacturing structures exceeding one (1) story or twenty-four (24) feet in height.
- (c) Hospitals/extended care facilities exceeding two (2) stories or thirty (30) feet in height.
- (d) Warehouse structures.

(6) View Preservation

The commercial development regulations, subsection D.3.f.vi.b.5.B.vi of this section, shall apply.

(7) Site Planning

The commercial development regulations, subsection D.3.f.vi.b.5.B.vii of this section, shall apply.

(D) Master Planned Developments Flexibility

Master planned developments are encouraged. The Town may accept alternative means for compliance with this section and design guidelines criteria on master planned sites of fifteen (15) acres or more, which

include, among other things, clustering of residential uses (if included in the plan) away from Tangerine Road, comprehensive interior circulation plans, a mixture of land use types (see subsection D.3.f.vi.b.5.B.vii.D.4 of this section) and pedestrian access amenities among uses.

(1) Applicability

Requests for waivers of otherwise applicable provisions and/or requirements of this Overlay District may be submitted in conjunction with applications filed under Town development procedures.

(2) Subject Matter

Any provision of this Overlay District, other than express prohibitions, may be altered in its application to an individual site upon persuasive presentation, documentation, and stipulation of alternative means for meeting or exceeding the intent of this section.

(3) Frontage Tracts

Use of reserved easements contained on the subject property which is consistent with Tangerine Road Corridor purposes (such as pathways, trails, view points, nature walks or other recreation) may be provided. The overriding interest of preserving native vegetation shall, in all instances, be observed.

(4) Mixtures of Use Types

Complementary land uses within planned developments that are principally intended to benefit its residents, customers or employees (such as commercial recreation, banking, retail and service establishments) may be proposed. Such uses shall be located internal to the development, buffered appropriately to be compatible with the predominant type of use.

- (a) Density/Intensity. Acceptable, additional uses, not to exceed ten percent (10%) of the total site area, shall not alter the overall yield of dwelling units or FAR of the proposed development; however, if such uses are found to contribute positive amenities for site quality, areas devoted to such uses shall not be subtracted from the gross site area for the purpose of dwelling density or FAR calculations.
- (b) Compatibility Assurance. Landscaping buffer yards or walls shall be employed to separate mixed uses from areas devoted to the predominant use. Vehicular traffic shall be minimized with a preference for pedestrian access to mixed uses.
- (c) Shared Facilities. Parking for mixed uses with differing peak activity times, open space, and project amenities may be proposed in locations suitable for meeting the requirements of this section and the needs of site residents, guests, customers, and/or employees.

c) Design Guidelines

- 1) Scenic resource area design guidelines are included in Addendum H. Guidelines are directions for achieving Town of Oro Valley expecta-

tions; they may be applied flexibly to achieve desired effects as a regulatory supplement to the development requirements set forth in subsections D.3.f.v and D.3.f.vi of this section. They are also in addition to the design guidelines included in Addendum A. The full intent of the design guidelines criteria should be met, as determined by the Conceptual Design Review Board.

- 2) The review of a development proposal's responsiveness to design guidelines is mandatory for all properties or portions of properties located in all three (3) tiers of the scenic resources category. Alternative means for complying with the guidelines' intent may be accepted by the Town.
- 3) Applicants or designers of these uses are expected to document proposals for construction with plans, graphics, elevations, and narrative descriptions that demonstrate responsiveness to these design guidelines.

g. Hillside Area Category

i. Purpose

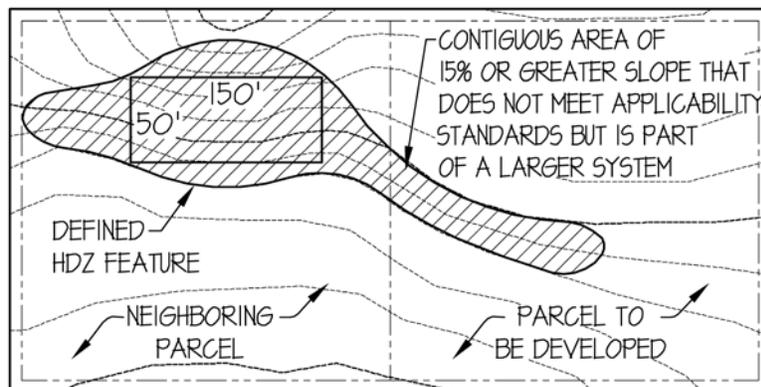
The Hillside Area category is intended to protect public safety, conserve visually significant sloped areas, evaluate slopes and potential impacts, and ensure development compatibility with the distinct hillside topography that is vital to the visual and scenic character of the Town.

ii. Applicability

The Hillside Area requirements apply to:

- a) Sloped areas of fifteen percent (15%) and greater where the sloped area is greater than one hundred fifty (150) feet in length and no less than fifty (50) feet wide and greater than seven and one-half (7 1/2) feet vertically.
- b) Sloped areas of fifteen percent (15%) and greater contiguous to any area defined in subsection D.3.g.ii.a of this section.

FIGURE 27.10-13: Hillside Area Applicability



- c) Ridges, as defined in Chapter 31, with an elevation change of twenty-five (25) feet or more.
 - d) Areas of less than fifteen percent (15%) slope are not restricted by these Hillside Area requirements.
 - e) Rock outcrops and boulders, as defined in subsections D.3.b.iii.b and D.3.d.iii.e of this section, are excluded from this section.
 - f) If a lot or parcel existing as of the date of adoption of the ordinance codified in this section does not meet the minimum size requirements of Table 27.10-4, disturbance limitations based on percent of slope from Table 27.10-4 still apply.
- iii. Sloped Area Analysis
- a) When land division, subdividing, site plan or other development approval is requested, a sloped area analysis shall be prepared and all areas of fifteen percent (15%) slope or greater shall be identified and delineated on the plans.
 - b) The sloped area analysis must be prepared by a State of Arizona licensed and registered engineer and shall identify and map all percent slope categories specified in Table 27.10-4.
 - c) Digital topographic information, with a one (1) foot contour interval, shall be used to prepare the sloped area analysis. Alternative information or methodologies may be approved by the Town Engineer.
- iv. Conservation
- Hillside areas shall be conserved in the following manner:
- a) Sloped areas from fifteen percent (15%) to less than twenty-five percent (25%) may be developed in a limited manner in accordance with the requirements of this section, subsection B of this section and the zoning code.
 - b) In accordance with the Critical Resource Category, ninety-five percent (95%) of sloped areas of twenty-five percent (25%) and greater are to be conserved as ESOS. For residential parcels of thirty-six (36) acres or larger comprised completely of twenty-five percent (25%) and greater slopes, ninety-six percent (96%) of sloped areas thirty-three percent (33%) and greater are to be conserved as ESOS. Exceptions may be approved in accordance with subsection F.2 of this section, Development Balance and Incentives.
- v. General Requirements
- a) A development envelope shall be delineated, in accordance with subsection F.3 of this section, on the subdivision plat, development and site plan when sloped areas of fifteen percent (15%) or greater are present on the plat, development or site plan.
 - b) For all subdivision plats, development envelopes for roadways, each lot and other disturbed areas shall be delineated. The development envelope shall be treated in accordance with subsection F.3 of this section.
 - c) When lots or site plans include sloped areas over fifteen percent (15%), the extent of grading or other ground disturbance of fifteen percent (15%) and

greater sloped areas is limited in accordance with Table 27.10-4. The limits of Table 27.10-4 do not apply to sloped areas of less than fifteen percent (15%).

- d) Subsection F.2 of this section, Development Balance and Incentives, may be applied to provide flexibility in designing lots that do not include areas of fifteen percent (15%) and greater slope.

TABLE 27.10-4: Slope Density and Disturbance Limits

Percent Slope	Minimum Lot Size (acres)	Maximum % of Sloped Area Disturbance	Maximum Building Height (ft) within Sloped Area
15 < 18	1.00	40.0	Per Base Zoning
18 < 20	1.5	30.0	18
20 < 25	2.00	20.0	18
25 < 33	8.00	5.0	18
33.0 and Greater	36.00	4.0	18

* Or as permitted by base zoning, whichever lot size is larger.

- e) If proposed lots include multiple slope categories:
 - 1) The extent of each slope category on the lot shall be delineated;
 - 2) Lot size is determined by the slope category comprising the largest percent of the proposed lot; and
 - 3) Sloped area disturbance limits in Table 27.10-4 apply to each slope category on the lot.
- f) Calculations shall be provided indicating the percent of disturbance, if any, to each slope category described in Table 27.10-4.
- g) Flexible Disturbance
 - 1) Applicability

Flexible design options may be applied to property or portions of property with slopes of fifteen percent (15%) and greater, but less than twenty percent (20%), and ridge features when:

 - A) Visually significant slopes and ridges are ninety-five percent (95%) conserved.
 - B) The cumulative size of designated hillside view conservation areas is five (5) acres or greater.
 - C) There are no demonstrable adverse impacts to other ESOS areas on site or to a riparian area downstream.
 - 2) Modified Requirements

Modified requirements can only be applied to areas that are not visible from existing public roadways, parks, and all trails identified in the Oro Valley Trails Master Plan.

When the conditions specified in subsection D.3.g.v.g.1 of this section are met, the slope density requirements and disturbance limitations of Table 27.10-4 are modified in conjunction with the rezoning, subdivision plat or site plan review process. Allowable modifications include:

- A) Sloped areas of fifteen percent (15%) and less than twenty percent (20%). Areas within these slope categories are exempt from the density and disturbance limitations of Table 27.10-4.
 - B) Cut and Fill Limits. The maximum cut or fill restrictions in Section 27.9 may be increased and shall not exceed twelve (12) feet measured vertically from existing grade to finished grade elevation.
- h) In determining the areas to be developed, maximum disturbance limits and specific design criteria must be considered. Table 27.10-4 indicates the maximum amount of grading and disturbance to sloped areas. Prioritized criteria for site planning and the delineation of hillside ESOS and/or hillside conservation areas are included below.
- 1) Subdivision design shall meet the following:
 - A) Contiguous location of hillside open space to established open space areas or other ESL features;
 - B) Minimized disturbance of ESL features as prioritized in subsection E.4.d of this section;
 - C) Conservation of the largest sloped areas of fifteen percent (15%) and greater on the site; and
 - D) Consolidation of hillside and other open space areas.
 - 2) Development envelope design on individual lots shall meet the criteria as listed above; however, replacing criteria in subsection D.3.g.v.h.1.C of this section with:

Exclude the areas of highest percent slope from the development envelope.
 - 3) Designation, Ownership and Maintenance of Hillside Areas
 - A) After delineation of permissible development areas, all remaining areas of twenty-five percent (25%) and greater slope shall be designated as ESOS tract(s) in accordance with the provisions of subsection E of this section, Open Space Requirements. Areas of twenty-five percent (25%) slope that do not meet the minimum requirements for ESOS shall be designated as Hillside conservation area.
 - B) Areas of fifteen percent (15%) and greater slope to be conserved may be designated as ESOS in accordance with subsection E of this section. Areas of fifteen percent (15%) and greater slope not designated as ESOS or that do not meet the minimum requirements for ESOS shall be designated as hillside conservation area. Hillside conservation areas may be allocated to common areas or designated on individual lots.

- C) Ownership and maintenance of hillside open space areas shall be assigned as follows:
 - i) Hillside ESOS tracts shall be dedicated to the HOA and hillside conservation areas shall be dedicated to the HOA or designated as a conservation easement on individual lots.
 - ii) Alternative ownership arrangements that provide an equivalent degree of conservation may be approved by the Town Council.
 - D) Open space identified during individual residential lot development or open space not meeting the minimum requirements for ESOS must be designated as hillside conservation area.
- vi. Hillside Area Design
- a) Development must be in compliance with subsection F.3 of this section, Design. Flexible development or conservation design options may be applied in accordance with the provisions and limitations in subsection F.2 of this section.
 - b) Building Height
 - 1) Building heights are limited in accordance with the applicable zoning district, except in ridge areas as described in subsection D.3.g.vi.c of this section.
 - 2) For buildings located in slope areas of fifteen percent (15%) and greater, building height shall be measured in the following manner:
 - A) Where building pad elevation is the same or higher than predevelopment grade due to engineered fill, the building height contour line method shall be used (as defined and illustrated in Chapter 31). Small areas of rugged terrain shall not increase or reduce building height. Small areas are those features with a maximum width of twenty-five (25) feet.
 - B) Where building pad elevation is lower than predevelopment grade due to cut conditions, building height is measured from finished grade.
 - 3) Additional building height of thirteen (13) feet may be approved in accordance with subsection F.2.c of this section, Flexible Development, but cannot be approved in scenic resource areas or protrude above adjacent ridges as viewed from public streets and abutting residential property. Adjacent ridges include ridge features on site or within one hundred fifty (150) feet of the proposed building.
 - c) Building rooflines shall not protrude above the existing height of a ridge, unless approved by the Town Council in accordance with the criteria below.
 - 1) Structures are single story, and no more than eighteen (18) feet, including parapets, above the building height contour line.
 - 2) Minimum forty (40) foot separation is maintained between residences.
 - 3) Roof design is limited to a slope of no greater than one-half (1/2) inch rise per twelve (12) inch horizontal run.

- 4) Approved plant materials are installed along exterior walls of fifteen (15) feet or more in length.
- d) Cut and fill slopes shall be shielded by structures to be invisible from adjacent properties or public roadways, or shall be colored or otherwise treated as approved by the Town Engineer in a manner to blend with surrounding native soils and rocks.
- e) All structures and appurtenances thereto such as antennas and satellite dishes shall be earth tone and shall comply with subsection F.3 of this section, structures.
- f) Outdoor storage shall be located within an entirely opaque barrier designed to match the materials, color, and finish of the primary structure. Storage or stored materials may not be visible from private or public streets or adjacent residential areas.
- g) Roof-mounted equipment is prohibited unless shielded from all neighboring properties. Screening devices may not exceed permitted building heights as measured in hillside areas.

(Ord. (O)11-01, Added, 2/16/11)

E. Open Space Requirements

1. Open Space ESOS Designation

Open space associated with the ESL conservation system is designated as environmentally sensitive open space (ESOS), except for the following resource categories:

- a. Hillside resource area.
- b. Scenic resource areas.

2. ESOS Tracts

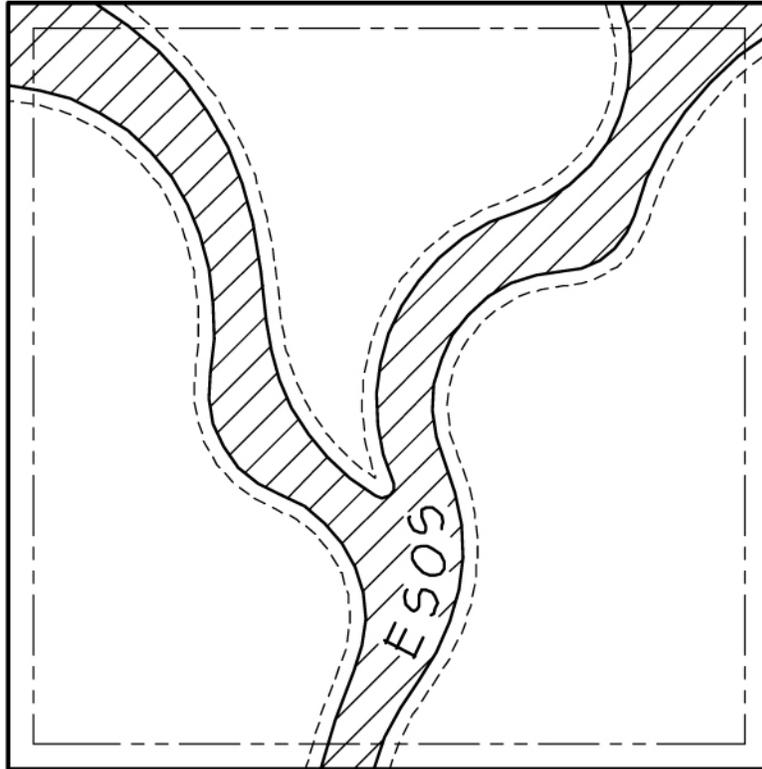
ESOS shall be permanently protected by one (1) of the following methods:

- a. Open space tract, or
- b. Dedication to the public including the Town, Pima County or Land Conservation Trust as approved by the Planning and Zoning Administrator, or
- c. A separate tract owned by a homeowners' association.

3. General Requirements

- a. Required ESOS must be configured in accordance with this section to conserve minimum percentages of identified resource categories as specified in Table 27.10-2.
- b. Development can only occur in the nonopen space areas of the site. Required open space areas must be designated as ESOS in one (1) of the approved forms described in subsection E.2 of this section.

FIGURE 27.10-14: Areas Designated as ESOS



- c. The quantity of open space created by recreation area, buffer yard, and other zoning-based open space requirements may be credited to resource management area ESOS only when:
 - i. Minimum ESOS dimensions are maintained as specified in subsection E.4.e of this section.
 - ii. Open space abuts ESOS and/or creates functional habitat connectivity.
 - iii. Compliance with subsection F.1 of this section, ESOS Use, is achieved.
- d. ESOS areas shall be assigned for dedication, conservation, and maintenance as follows:
 - i. ESOS areas of National, State, regional, or community-wide importance will be the responsibility of a public entity, land trust, or land conservation organization that is capable of satisfying the objectives specified herein. This level of dedication shall include ESOS areas with the following characteristics:
 - a) Adjacent to Federal, State or County parks, preserves or other permanent open space.
 - b) Regionally significant drainage.

- c) Significant cultural resource when preservation in place is specified in an approved treatment plan, subsection D.3.e of this section.
 - d) Inclusion of identified major wildlife linkage areas.
 - ii. All other ESOS areas that contribute resource value primarily to adjacent neighborhoods and do not meet the criteria above shall be the responsibility of an HOA.
 - iii. Alternative ownership arrangements that provide an equivalent degree of conservation may be approved by the Town Council.
- e. Permanent open space easements and/or deed restrictions must be provided for all ESOS tracts, unless dedicated to the public, prior to certifying that all conditions of rezoning, site plan or plat have been satisfied. Said easements or deed restrictions will be included on documents upon official recordation.
- f. The open space easement or deed restriction must include the following:
 - i. Compliance with use and access provisions provided in subsection F.1 of this section.
 - ii. Provisions to fund maintenance in perpetuity that may include:
 - a) Use of future homeowners' association dues, or
 - b) Agreement for the Town to provide open space maintenance, or
 - c) Assurance from a third party caretaker such as a land trust, or
 - d) Other methods to assure maintenance as approved by the Planning and Zoning Administrator.
- g. Maintenance
 - i. Maintenance, when necessary, is required for established ESOS areas. Provisions for ESOS maintenance shall be established prior to development application approval.
 - ii. Maintenance shall include ongoing trash removal, sign repair/replacement and elimination of invasive plant species.
 - iii. The Town retains the authority to perform maintenance in ESOS tracts or common areas managed by an HOA or other property management association. A note will be included on the subdivision plat and/or site plan indicating the Town's ability to enter the property and perform ESOS maintenance.
- h. Common area or tract ESOS locations and boundaries, including precise acreage, shall be shown on the subdivision plat and/or site plan.
- i. The following subdivision plat requirements apply to required ESOS areas:
 - i. On residential lots one-half (1/2) acre or less, ESOS must be platted separately from designated building areas.
 - ii. On residential lots greater than one-half (1/2) acre, ESOS may be included within the building lot area or platted separately from designated building areas.

- iii. ESOS must be platted separately from any developable commercial lot.
 - j. In no event shall the provisions of this section require greater area of ESOS than required by subsection D.3 of this section.
4. Criteria for ESOS Selection and Location

The following criteria must be used to select and locate ESOS providing the greatest degree of conservation for the most sensitive resource categories.

- a. All resource areas identified on the ESL Planning Map enable limited encroachments as specified in Table 27.10-5.

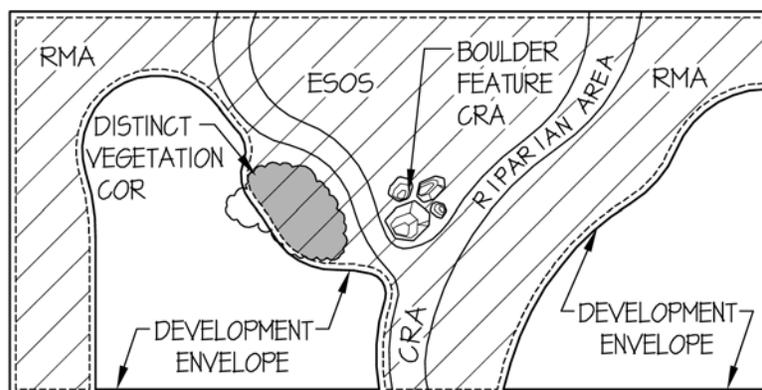
TABLE 27.10-5: ESOS Conservation and Disturbance

Category	Maximum Percentage Disturbance Permitted	Minimum Percentage ESOS Conservation
Major Wildlife Linkage	0*	100
Critical Resource Area	5	95
Core Resource Area	20	80
Resource Management Area-1	34	66
Resource Management Area-2	75	25
Resource Management Area-3	100	0
* Permitted uses, such as trails, specified in subsection F.1.b of this section require a minimal degree of disturbance.		

- b. The required percentage of ESOS is applied to total acreage of the identified resource area(s) and not a cumulative total of individual resources such as rock outcrops, boulders, and distinctive plant stands.
- c. Within the resource categories, specific locations of final conservation and permitted disturbance areas shall be identified for each individual site as part of the development review process.
- d. All mapped ESL resource areas meet required values specified in the category descriptions in subsection D.3 of this section. The following factors must be utilized to select priority areas for conservation within a resource category designation:
 - i. Areas that maintain or create connectivity of open space within and beyond the site are the highest priority.
 - ii. Areas that exceed resource area density, size, and frequency specifications are a high priority.
 - iii. The value of different resources within a specific category will be balanced in a manner to achieve diversity of habitat.
 - iv. ESOS credit for cultural resources will be addressed in concert with an approved treatment plan.
 - v. Disturbance areas should be located in areas of least resource density, size, and frequency.
 - vi. Areas that include healthy and viable resources are a priority.

- vii. When a site includes multiple outcrops and boulders, conservation priority will be given to outcrops and boulders displaying one (1) or more of the following characteristics:
- a) The largest rock outcrop or boulder features, including height and areas as measured vertically from the lowest adjacent natural grade or horizontally in any direction.
 - b) The rock outcrop or boulder is an isolated feature, located one thousand (1,000) feet or more from public preserves, major wildlife linkages or other rock outcrop or boulder features.
 - c) The rock outcrop or boulder feature provides connectivity between two (2) identified ESL areas, or is part of an identified linkage area including minor or major wildlife linkages and riparian areas.
 - d) The rock outcrop or boulder exhibits fractures, cracks and/or crevices.

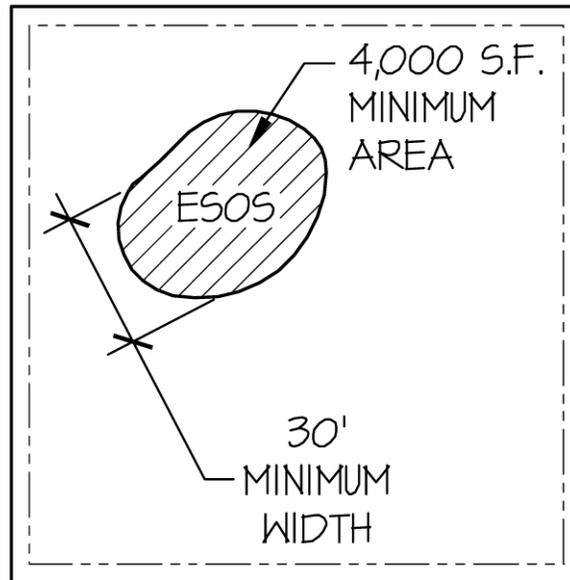
FIGURE 27.10-15: Multiple ESL Features and ESOS Areas



- e. Minimum ESOS Dimensions
- i. Applicability. Dimensions apply to all resources except rock outcrops, boulders, and cultural resources.
 - ii. Area. The minimum contiguous area for ESOS is four thousand (4,000) square feet.
 - iii. Horizontal. The minimum horizontal dimension for ESOS areas is thirty (30) feet.
 - iv. Exceptions. ESOS dimensions do not apply to distinct native vegetation.
 - v. Modification. The Planning and Zoning Administrator may approve modifications to the minimum ESOS dimensions set forth above, subject to the following criteria:
 - a) The ESOS location criteria set forth in this subsection E.4 are met.
 - b) Landscape connectivity and open space linkages are maintained.

- c) Reductions in dimensions will maintain ESOS areas that provide habitat value, are easily recognizable, and will not result in maintenance problems due to their proposed locations.
- d) Adjacent land uses, such as streets, will not negatively impact the viability of vegetation or other features of the land to be preserved.

FIGURE 27.10-16: Minimum ESOS Dimensions



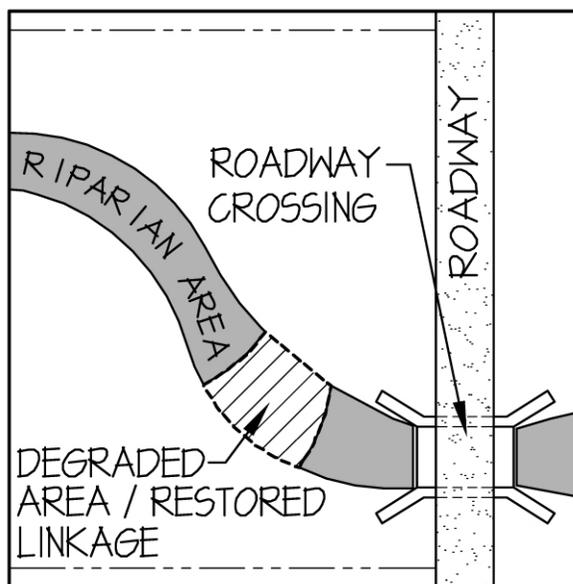
- f. ESOS distribution within planned area developments (PADs).

If a master developer elects to provide ESOS in excess of the minimum requirements for a specific development site, the balance may be credited against ESOS requirements for other development sites within the Town, if approved by the Town Council. ESOS may be credited as follows:

- i. Any excess ESOS areas and the resultant credits shall be acknowledged by the property owner and shown as part of an Open Space Master Plan.
 - ii. The Open Space Master Plan shall be included with the PAD application and must identify any excess ESOS by development project and allocate any excess ESOS to specific development locations elsewhere within the Open Space Master Plan.
 - iii. The excess ESOS must result in additional protection for the most sensitive resources in accordance with the hierarchy established in Table 27.10-5. Reductions in ESOS due to the application of credits cannot be applied to major wildlife linkage or critical resource areas.
- g. Connectivity of ESOS areas is essential in maintaining ecosystem function. Conservation of identified areas that provide connectivity but are environmentally degraded is required.

- i. Degraded areas that provide connectivity to the natural open space system, including identified minor wildlife linkages, must be protected from further disturbance. Restoration in accordance with ESL mitigation requirements, subsection G of this section, may be approved by the Planning and Zoning Administrator.
- ii. Additional open space linkages that have not been identified on the ESL Planning Map may be recommended by the Planning and Zoning Administrator when the area:
 - a) Provides a unique and necessary connection to other ESOS areas.
 - b) Is not isolated from other open space areas.
 - c) Serves as a habitat corridor for movement of wildlife.
 - d) Newly identified linkages will be conserved in accordance with the following:
 - 1) Restoration areas will be applied toward total ESOS requirements of the appropriate resource category as assigned by the Planning and Zoning Administrator.
 - 2) A proportional area will be exempt from native plant salvage and mitigation requirements in Section 27.6.B. This does not apply to any plant listed as threatened or endangered under the Endangered Species Act or highly safeguarded by the Arizona Department of Agriculture.

FIGURE 27.10-17: Degraded/Restored Linkage



(Ord. (O)11-01, Added, 2/16/11)

F. ESOS Use and Conservation Development

1. ESOS Use

a. Applicability

Areas protected as ESOS, upon approval of a development application, are subject to use restrictions and requirements. Each must be recorded when land is reserved by tract and/or deed restriction.

b. Permitted Uses

- i. Natural open space.
- ii. Trails.
- iii. Identification, use restriction, and/or interpretive signage.
- iv. Cultural resource exhibition.
- v. Essential services as provided for in subsection F.2.f.vi of this section.
- vi. The following when in the resource management category:
 - a) Golf courses as limited below:
 - 1) Design must be in accordance with Section 24.6.C, golf course overlay zone development, and Section 27.6, Landscape Conservation (turf limitations).
 - 2) Golf course best environmental management practices for irrigation, fertilizer use and pest control must be utilized.
 - 3) Golf cart paths must be designed to minimize disturbance and avoid distinct vegetation and other environmentally sensitive features. Paved paths may be utilized.
 - b) Neighborhood-serving passive and active recreation facilities that are compatible with the conservation purposes of ESOS and do not include impermeable surfaces unless provided herein. Allowable facilities include:
 - 1) Soccer or ball field.
 - 2) Volleyball court.
 - 3) Horseshoe pit.
 - 4) Parcourse.
 - 5) Turf area subject to the limitations of Section 27.6.
 - 6) Benches.
 - 7) Picnic tables.
 - 8) Barbecue grills.

- 9) Pathways.
 - 10) Impervious sidewalks for ADA accessibility.
 - 11) Open air ramadas and/or shade awnings.
 - 12) Garbage containers and dog stations.
 - 13) Other uses that have no greater impact than those specified above, subject to review and approval by the Planning and Zoning Administrator.
- c. Prohibited Uses and Actions
- i. Enclosed Structures.
 - ii. Parking.
 - iii. Walls and fences.
 - iv. Dumpsters.
 - v. Motorized vehicle access except for maintenance purposes.
 - vi. Recreational activities not contained within the confines of a designated area.
 - vii. Off-leash domestic animals.
 - viii. Establishment of nonnative species.
 - ix. Removal of native vegetation with the following exceptions:
 - a) Development of recreation areas.
 - b) Flood control purposes as approved by the Planning and Zoning Administrator and Town Engineer.
- d. Access and Use
- i. Private and Public Access
 - a) ESOS in common area ownership of a homeowners' association may be restricted to private access. This excludes trail routes designated for public use as specified in subsection F.1.d.i.b of this section.
 - b) All trails identified within the Eastern Pima County Trails System Master Plan and/or the Oro Valley Trails Task Force report and their subsequent updates must enable public access.
 - c) All ESOS dedicated to the public will be open to public access.
 - ii. Motorized Vehicular Access
 - a) Access into ESOS areas is permitted for maintenance purposes and permitted uses only.

- b) Within major wildlife linkages, access is permitted for open space maintenance purposes only. Additional access can be permitted if, supported by scientific evidence, such access will not degrade the intended function of the linkage.

iii. Trails

Trails and associated amenities such as benches must conform to standards established by the Oro Valley Parks and Recreation Department.

iv. Signs

- a) Permanent signs shall be posted at defined points of access into ESOS areas indicating the use restrictions contained in this section.
- b) Signs must conform to standards established by the Oro Valley Parks and Recreation Department.

2. Development Balance and Incentives

a. Purpose

Achieving or exceeding base zoning densities while implementing conservation objectives is the purpose of this section, which includes increased flexibility for site planning, lot sizes and dwelling types.

b. Applicability

- i. The following design options may be applied to property or portions of property when ESOS is applied to twenty-five percent (25%) or more of a project site, except as provided herein.

c. Flexible Development

- i. Process. Development requirements may be modified to allow flexibility as a part of the rezoning, subdivision plat, or site plan review process. The process to enable use of flexible development options is delineated by application type:

- a) As part of a rezoning application, the Town Council retains discretion to enable flexible design options on a case-by-case basis.

- b) For site plan and subdivision plat proposals utilizing the ESL application incentive provided in subsection B.3 of this section, all flexible options are permitted upon Planning and Zoning Administrator review and approval, except the following:

- 1) Subsection F.2.c.iii.e of this section, Building Height. Increases to building in excess of five (5) feet must be considered by the Conceptual Design Review Board and approved by Town Council.

- 2) Subsection F.2.c.iii.f of this section, Open Space.

- 3) Subsection F.2.c.iii.g of this section, Mixed Use.

- ii. Review Criteria. The determination to permit a modification is subject to all of the following findings:

- a) Enables development to the base zoning density, at a minimum, for the entire site.
 - b) Compatibility with adjacent land uses is achieved through architectural design, buffers, and placement of structures and improvements to reduce view impacts.
 - c) The modification does not conflict with an approved treatment plan for cultural resources.
 - d) Statutes, development agreements, appeal processes, or other provisions of this code are not violated.
- iii. Requirements Subject to Modification

The following requirements may be modified as they relate to the proposed construction of single-family attached and detached residences, multi-family residences, commercial, employment and mixed use projects.

- a) **Building Setback.** Minimum setbacks may be reduced to no less than five (5) feet on lots less than or equal to twelve thousand (12,000) square feet and up to twenty percent (20%) of the required distance on lots greater than twelve thousand (12,000) square feet. Reductions are subject to the following:
 - 1) Side yards shall not be less than five (5) feet, unless a zero lot line design is utilized.
 - 2) Setback reductions shall not result in on-lot driveway lengths that are less than twenty (20) feet.
 - 3) Reductions do not apply to setback requirements in subsection F.2.d.ii.e.2 of this section for a conservation subdivision design.
- b) **Landscape Buffer Yards.** Minimum required buffer yards may be reduced to ten (10) feet with a corresponding decrease in planting ratios specified in Section 27.6, Table 27-10, except when the buffer yard is adjacent to an existing residential subdivision or public street.
- c) **Minimum Lot Size.** Minimum lot sizes in all R1, R-4, R-S and SDH-6 districts may be modified subject to conservation design requirements of this section.
- d) **Off-Street Parking.** Modifications resulting in reduced amounts of parking and circulation area are supported. Off-street parking requirements may be reduced in accordance with Section 27.7.C.2.
- e) **Building Height.** Building heights for single-family attached and multi-family dwelling types may be increased by no more than thirteen (13) feet.
- f) **Open Space.** Reductions may be provided in accordance with subsection F.2.f of this section, open space requirements.
- g) **Mixed Use.** Residential uses that are functionally integrated, including access, nonvehicular circulation and amenities, with commercial or employment uses may be approved within commercial zoning districts.

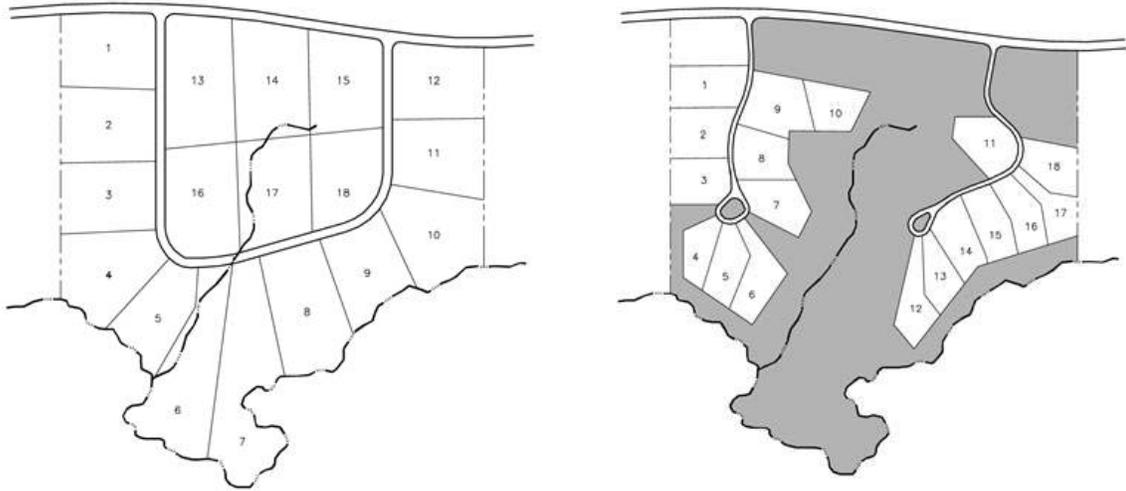
- h) Modified Review Process. Site plans and preliminary plats submitted in conformance with the approved Tentative Development Plan, as determined by the Planning and Zoning Administrator, may be administratively approved.
 - i) Recreation Area Credit. Permissible passive and/or active recreational amenities located within resource management area ESOS may be credited toward residential recreation area requirements as approved by the Planning and Zoning Administrator when the locational requirements of Section 26.5, Provision of Recreational Area, are satisfied. Connectivity of open space must be maintained.
 - j) Native Vegetation Preservation. When fifty percent (50%) or more of a site is preserved as ESOS, requirements for native plant salvage and mitigation (Section 27.6B) shall be waived within a development envelope. This modification cannot be applied to areas of distinct vegetation which are designated as a core resource area or native plants that are considered threatened or endangered under the Endangered Species Act or highly safeguarded by the Arizona Department of Agriculture.
 - d. Conservation Subdivision Design
 - i. Purpose

Conservation subdivision design positions residential development on a portion of the available land in order to maximize protected open space and improve the efficiency of infrastructure systems. The provisions of this section further provide off-sets to typical reductions in development yield derived from drainage and circulation improvements. Conservation options include potential increases to development density.
 - ii. General Requirements
 - a) Development shall be arranged in a manner to conserve identified resources.
 - b) The area to be developed must be consolidated to a greater extent than permitted in Section 23.4, Table of Dimensional Requirements, and provide a concomitant increase in ESOS.
 - c) Conservation subdivision design shall enable a maximum number of individual lots that adjoin open space areas. Designs that create a single grouping of residences are not intended unless specific site conditions leave no alternative. Multiple groupings of residences are typically expected in a conservation subdivision design. Examples of desired conservation design are shown in Figure 27.10-18.

FIGURE 27.10-18: Conservation Subdivision Design Examples

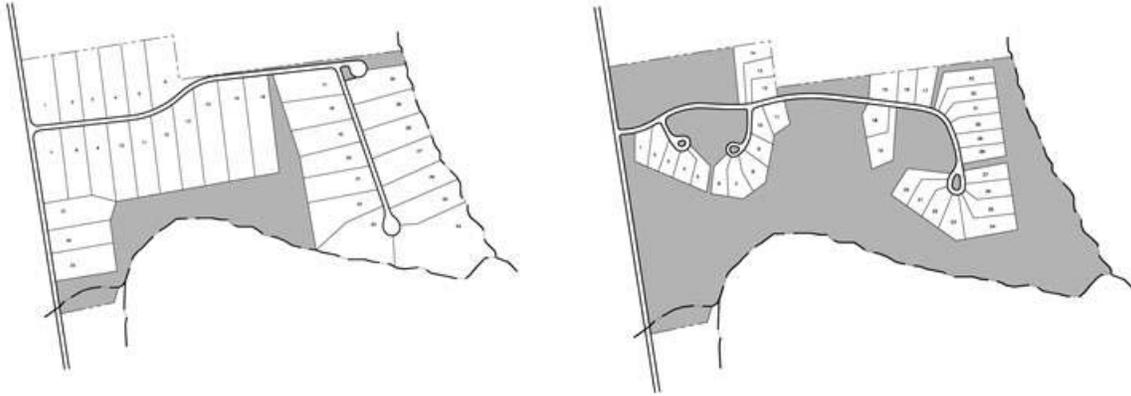


Example 1



Example 2

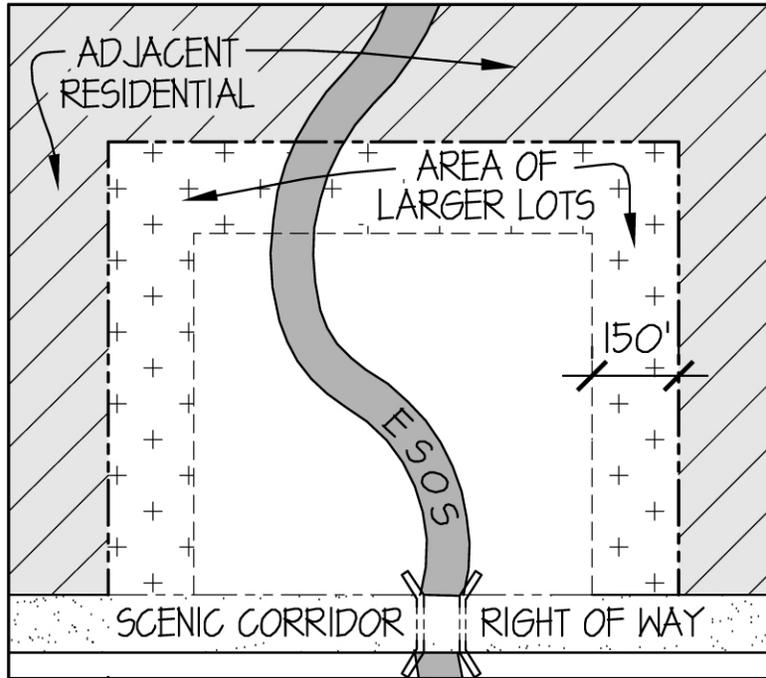
FIGURE 27.10-18: Conservation Subdivision Design Examples (Continued)



Example 3

- d) Open space areas created by conservation subdivision design must remain viable for wildlife use and movement.
- e) Compatibility with adjacent land uses through architectural design, transition of density, buffers, and placement of structures and improvements must be achieved as follows:
 - 1) Architectural Design. Structures shall include architectural design features and a color palette that is compatible with an adjacent subdivision(s). Design compatibility is subject to Conceptual Design Review Board review and approval.
 - 2) Lot Size Transition. In perimeter areas adjacent to residential development, a transition shall be provided. Base zoning district lot sizes are required within one hundred fifty (150) feet of adjacent residential uses.

FIGURE 27.10-19: Lot Size Transition



- f) Conservation subdivision designs may employ any dwelling unit type permitted by the zoning code, except site-delivered housing as defined in Chapter 31.
 - 1) Alternative dwelling unit types shall employ the zoning code development requirements associated with said alternative dwelling type.
 - A) If townhouse dwellings are proposed, the requirements for the R-4 zoning classification, Section 23.7.B, shall be applied.
 - B) If multi-family dwellings are proposed, the requirements for the R-6 zoning classification, Section 23.7.E, shall be applied.
 - 2) The sum total of square feet by which the area of each lot in the subdivision is reduced shall not exceed the total square footage of the conserved area.
- g) Any proposed increase in density must be specified on the tentative development plan required for rezoning.
- h) Building heights must comply with base zoning, or building heights modified by an ESL rezoning approval.
- iii. Lot Size Reduction
 - a) Conservation subdivision design without an increase in density may occur by reducing minimum lot sizes while retaining the overall base zoning dwelling

count as defined in Chapter 31. All density calculations for ESL are intended to be completed using this method (See Figure 27.10-20).

- b) When ESOS is applied to twenty-five percent (25%) or more of a project site, residential lots may be reduced in size by forty percent (40%), but shall not be smaller than the minimum lot areas set forth in Table 27.10-6.

TABLE 27.10-6: Allowable Lot Size Reductions with 25% ESOS

District	Minimum Base Zoning Lot Area	Minimum Conservation Subdivision Lot Size
R1-144	144,000	43,560
R1-43	43,000	24,000
R1-36	36,000	21,600
R1-20	20,000	12,000
R1-10	10,000	6,000
R1-7	7,000	5,500
SDH-6	6,000	5,500

- c) When ESOS is applied to sixty-six percent (66%) or more of a project site, residential lot size may be reduced to a minimum of three thousand (3,000) square feet.
- e. Conservation Development with Density Increase
- i. When conservation development designs are utilized and minimum open space requirements of this section are met, a density increase of ten percent (10%) above the base zoning density is permitted for residential and nonresidential development.
 - ii. A density incentive up to twenty percent (20%) of the residential base zoning density or commercial intensity is permitted if ESOS requirements are exceeded by ten percent (10%) or more.
 - iii. This density bonus provision may be applied when utilizing the flexibility and modifications permitted in this section.
 - iv. The increase in residential density is calculated by dividing the area of additional ESOS by the minimum lot area of the base zoning district. Maximum density increases for development are listed in Table 27.10-7. The increase in nonresidential intensity is two percent (2%) additional FAR for each additional one percent (1%) of open space, not to exceed the maximum listed in Table 27.10-7.

**FIGURE 27.10-20:
Formula to Calculate Base Zoning Dwelling Count and Density Bonus**

<p>Step One:</p> <p>Base Zoning Dwelling Count = Gross Land Area ÷ Minimum Lot Area of Base Zone</p> <p>Step Two:</p> <p>Additional Dwellings Permitted = Additional ESOS Area (acres) ÷ Base Zoning Lot Size</p> <p>Step Three:</p> <p>Total Allowable Dwelling Count with Bonus = Additional Dwellings + Base Zoning Dwelling Count</p>
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- v. The additional ESOS must meet the following criteria:
- a) Meet the requirements in subsection E of this section, Open Space Requirements.
 - b) Be natural, undisturbed desert area and cannot include revegetated areas.
 - c) The additional ESOS shall be provided in common area or separate tracts and cannot be located on an individual single-family lot.

TABLE 27.10-7: Maximum Density Bonus

Zoning District	Minimum Area per Dwelling	Base Density (D.U.s / acre)	Maximum Density with Bonus
Residential			
R1-300	300,000	0.15	0.18
R1-144	144,000	0.3	0.36
R1-72	72,000	0.6	0.72
R1-43	43,000	1.0	1.2
R1-36	36,000	1.2	1.44
R1-20	20,000	2.2	2.64
R1-10	10,000	4.4	5.28
R1-7	7,000	6.2	7.44
SDH-6	6,000	7.3	8.76
R-4	5,450	8.0	9.6
R-4R	4,250/rental	10.2	12.24
	15,000/dwelling	2.9	3.48
R-S	5,450	8.0	9.6
R-6	3,500	12.4	14.88
Nonresidential			
		Base (FAR)	Maximum FAR with Bonus
CN		0.20	0.24
C-1		0.30	0.36
C-2		0.40	0.48
PS			
T-P		0.50	0.60
POS		0.15	0.18

- f. ESOS Flexibility
 - i. ESOS flexibility is available for any property subject to the requirements contained in this section. The applicability requirements of subsection F.2.b of this section do not apply.
 - ii. The Town Council may reduce the amount of required ESOS specified in Table 27.10-2.
 - iii. Review and approval of a proposed reduction in ESOS is subject to the following limitations:
 - a) Critical and core resource areas: ten percent (10%) maximum reduction.
 - b) Resource management areas: twenty-five percent (25%) maximum reduction.
 - c) Major wildlife linkage areas: No reduction permitted.

iv. Criteria

When it is demonstrated that one (1) of the following criteria is satisfied and that open space connectivity is equally conserved, a reduction in minimum ESOS in the critical, core or resource management areas may be approved by the Town Council.

- a) The site is identified as appropriate for C-1, C-2 or Technological Park growth in accordance with the adopted strategic economic development policy, or
- b) Development proposal is wildlife permeable as defined in Chapter 31, or
- c) The area has been isolated by development from other open spaces and lost all connectivity with other open space areas.

v. Resource Priorities

Relative resource priorities as identified in subsection E.4.d of this section shall be applied to guide open space design when ESOS flexibility is requested.

vi. Essential Services

- a) Essential services include utilities, sewer improvements, and roads. Within the major wildlife linkages, roads are limited to utility access and trailheads.
- b) Disturbances to ESOS for essential services may be approved by the Town Council when:
 - 1) Improvements do not negate the intent to conserve viable habitat and connections for wildlife movement; and
 - 2) Mitigation will be provided to achieve equivalent or superior habitat conditions; and
 - 3) It has been demonstrated that the least amount of disturbance has been planned.
- c) Areas disturbed as a result of providing flexibility for essential services must be mitigated in accordance with subsection G of this section, Mitigation.
- d) Areas damaged by roads or infrastructure that do not enable complete restoration must be mitigated by providing on-site replacement of the same quantity and quality of ESOS or providing off-site mitigation as outlined below.

vii. Off-Site Mitigation

As a component of ESOS flexibility, ESOS may be provided on an alternative, off-site land parcel subject to the following:

- a) Off-site mitigation proposals must further the purposes of the ESL regulations.
- b) The resources must be equal or higher value in the ESL hierarchical system.
- c) Mitigation must be provided on a one to one (1:1) ratio.
- d) The remaining ESOS, after any reduction, retains its environmental value as intended by the ESL regulations.

viii. Approved Cultural Resources Site

Land designated as a protected cultural resources site in accordance with an approved treatment plan shall qualify as required ESOS on a one to three (1:3) basis (each square foot of cultural resource site shall equal three (3) square feet of required ESOS) as determined by the Planning and Zoning Administrator.

3. Design

a. Development Envelope

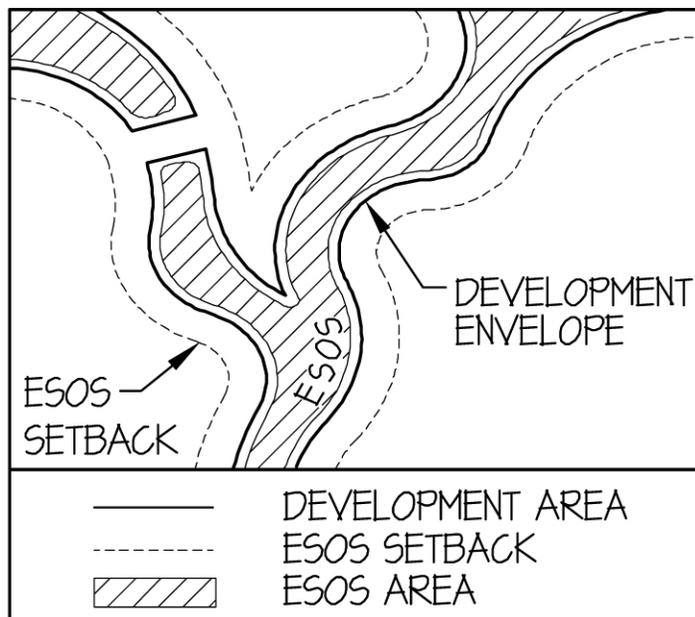
- i. Development envelopes must be delineated when development is proposed adjacent to ESOS areas. The specific location of a development envelope shall be shown on the site plan, subdivision plat, improvement plan, and Type 1 grading permit. The method of delineating the envelope boundary must enable precise field verification.
- ii. All improvements requiring ground disturbance shall be contained within development envelopes. No clearing, grading, grubbing, or disturbance may occur outside of the approved development envelopes or within ESOS areas subject to specified exceptions in subsections F.1, Permitted Uses, F.1.c.v, prohibited uses-vehicular access, and F.2.f.vi, open space-essential services, of this section.
- iii. A field survey to determine the location of development envelope boundaries is required at the discretion of the Planning and Zoning Administrator.
- iv. The boundary of ESOS or the development envelope shall be delineated by a temporary, highly visible, protective fence. Fencing must be established prior to construction and remain in place until construction is complete as determined by the Planning and Zoning Administrator.

b. ESOS Setbacks

- i. All structures must be set back to permit their installation or construction without any impact to ESOS areas. The following setbacks apply to the following structures:
 - a) Walls and fences: fifteen (15) feet.
 - b) Buildings, ramadas, play structures, similar accessory structures, swimming pools, and retaining walls over three (3) feet: twenty (20) feet.

Setbacks may be reduced at the discretion of the Planning and Zoning Administrator to no less than five (5) feet if the property owner can demonstrate conditions or specific techniques that ensure no encroachment into ESOS.

FIGURE 27.10-21: Building Envelope and ESOS Setback



- ii. When other setbacks are required per the zoning code, the more restrictive setback shall apply.
 - iii. The Planning and Zoning Administrator may require wider ESOS setbacks where conditions dictate additional disturbance is required for construction.
- c. Rock Outcrops and Boulders
- Mitigation measures are required for rock outcrop and boulder encroachments. A mitigation plan, prepared in accordance with the requirements contained in subsection G of this section, Mitigation, is required.
- d. Circulation Improvements
- i. Circulation improvements include facilities for vehicular and nonvehicular use such as roadways, driveways, parking, circulation areas, bridges, drainage crossings, multi-use and bicycle pathways and sidewalks. Trail system design is addressed in subsections F.1.d and F.2.f.vi of this section, open space.
 - ii. Circulation improvements must be designed to avoid impacts to environmentally sensitive areas. When no other viable alternative exists, circulation improvements shall use shortest distance alignments and otherwise minimize grading and disturbance of environmentally sensitive areas.
 - iii. The design of circulation improvements and wildlife crossings in environmentally sensitive areas shall:
 - a) Comply with Oro Valley subdivision street standards and the drainage design criteria unless specifically modified to preserve ESL resources and approved by the Town Engineer;

- b) Be based on a Town-approved assessment of wildlife species occurring in the area; and
 - c) Include design features that support conservation of identified species.
 - iv. The Town Engineer retains discretion for specifying wildlife-friendly design features for circulation improvements located in environmentally sensitive areas.
 - v. Restoration of all disturbed areas is required in accordance with subsection G of this section, Mitigation.
- e. Structures
- i. For all structures on residential lots adjacent to ESOS, or nonresidential and multi-family structures within two hundred (200) feet of ESOS, building materials must meet the requirements listed in subsection F.3.e.ii of this section.
 - ii. Design requirements for all structures and utility equipment such as surface-mounted utility transformers, pull boxes, pedestal cabinets, service terminals or other similar on-the-ground facilities include:
 - a) Glass surfaces shall not exceed a reflectivity of twenty percent (20%).
 - b) Exterior finishes shall not exceed a reflectivity of sixty percent (60%).
 - c) Materials used for exterior surfaces of all structures shall match in color, hue, and tone with the surrounding natural desert setting. Green and beige hues and tones are preferred for utility equipment located in environmentally sensitive areas.

Surface materials of walls, retaining walls or fences shall be similar to and compatible with those of the adjacent main buildings.
 - d) Cumulative application of structural and other design requirements within scenic resource areas.
- f. Permanent Walls and Fences
- i. In open space areas such as recreation areas, buffer yards and drainage facilities adjacent to ESOS and in wildlife permeable development, wall and fence design features shall:
 - a) Be wildlife-friendly and promote conservation of identified species as determined by the Planning and Zoning Administrator.
 - b) Utilize wall and fence design based on a Town-approved assessment of the wildlife species using the area.
 - ii. No walls, fences, or other barriers may be located so as to impede wildlife movement through designated ESOS. Walls or fences shall not enclose or disconnect contiguous ESOS.
 - iii. Chain link, wire mesh, woven wire and similar fence materials are prohibited.
 - iv. Walls can be in the form of a view fence that combines solid wall elements with wrought iron or other open material to permit unobstructed views.

- v. Walls and fences shall not require the removal of distinctive vegetation as defined in subsection D.3.c.iii.d of this section.
- vi. Walls shall be built of materials that blend into the rough textures and rustic character of the vegetation, rocks and other features of the natural desert setting and shall comply with Section 27.6.C.5, landscape conservation – screening.

(Ord. (O)11-01, Added, 2/16/11)

G. Mitigation

1. Purpose

Site-specific mitigation is required in order to restore biological functions and resource values of riparian areas, distinctive vegetation and rock outcrop features impacted by development activity or previous human disturbance.

2. Applicability

- a. Mitigation is required for disturbed areas of environmentally sensitive resources including restoration due to impacts from:
 - i. Essential services installation as described in subsection F.2.f.vi of this section;
 - ii. Degraded linkage areas as described in subsection E.4.g of this section; and
 - iii. Other instances of disturbance to environmentally sensitive resources.
- b. This section applies to natural resources and does not apply to mitigation of a cultural resource.

3. General Requirements

Mitigation specific to each disturbed area is required for impacts to environmentally sensitive resources including:

- a. Riparian areas;
- b. Distinctive plant stands and communities; and
- c. Rock outcrops and boulders.

4. Mitigation

- a. Site Characterization
 - i. If the proposed impact area is less than one-quarter (1/4) acre in size, prior to disturbance the site shall be characterized through a one hundred percent (100%) inventory of resource elements.
 - ii. If the proposed impact area is greater than one-quarter (1/4) acre in size site characterization may be accomplished through sampling as described below.

- b. Sampling Riparian Areas and Distinctive Vegetation Stands
 - i. Sample Area(s)
 - a) Determine the sample areas within which plots or transects will be established in accordance with reference site requirements. The following qualities shall be included in the sample area:
 - 1) Sample areas for distinctive vegetation stands should include stands of mature and healthy vegetation that meet the minimum cover or density definitions in the ESL for those resources being impacted.
 - 2) Sample areas' area shall be large enough to include all species belonging to the plant community.
 - 3) The habitat should be relatively uniform throughout a single sample area. Each habitat type shall be sampled separately.
 - ii. Configuration
 - a) Plots or transects shall be distributed throughout the sample area in a manner to capture all of the variability within that sample area. Plots or transects can be either located randomly within a sample area or according to an orderly sampling scheme (e.g., on a grid, at regular intervals, etc.) – as long as the result is that the sample area is accurately described by the plot number and arrangement.
 - b) The sampling locations must be approved as part of the mitigation plan review process, and must be representative of the area being sampled.
 - iii. Plot Sampling
 - a) Plot sampling, or quadrat sampling, can be used to describe a variety of plant community characteristics of an area that is too large for a complete vegetation inventory to be feasible.
 - b) The parameters to be addressed include: diversity (species present), cover, and density (number of species in a given area).
 - c) The number of plots or transects conducted within each sample area should be sufficient to characterize the range of vegetation conditions within it.
 - d) Size and Shape
 - 1) Plot size and shape should fit the nature of the vegetation community to be sampled. Circular plots are generally recommended with these field mapping standards, as they are more efficient to accurately establish in the field.
 - 2) Plot size should be large enough to include a significant number of individual plants, representing all dominant species, but small enough that plants can be counted without duplication or omission of individuals.
 - 3) Suggested plot sizes that are typically appropriate for vegetation in the context of riparian habitat are listed below. Site characteristics may necessitate using a different plot size or shape (i.e., if the riparian veg-

etation entity is not wide enough). Plot shape and size should be consistent throughout.

- 4) Circular plots (preferred): ten (10) meter radius (314 m² or 3,380 ft²).
- 5) Square plots: fifteen (15) to twenty (20) meters per side (225 m² to 400 m² or 2,422 ft² to 4,306 ft²).
- 6) Rectangular plots: fifteen (15) meters by twenty (20) meters (300 m² or 3,229 ft²).

iv. Transect Sampling

Transects may be conducted according to the point intercept and belt transect methods. The method is based on a fifty (50) meter point transect centered on a two (2) by fifty (50) meter plot (i.e., the belt transect). Using this method, vegetation is sampled by points at one-half (1/2) meter intervals along the fifty (50) meter transect to determine cover. The surveyor will note the species encountered at each interval. In addition, individuals of each perennial species rooted within the two (2) by fifty (50) meter plot will be counted to determine density and diversity. All annuals present in the two (2) by fifty (50) meter plot will also be noted.

c. Rock Outcrops and Boulders

If rock outcrops and/or boulders, as defined in Chapter 31, will be impacted beyond established thresholds, they must be addressed in the mitigation plan through salvage and relocation to re-create the original character as determined by an assessment of the following features:

- i. The surface area and average height of the feature.
- ii. Average size of boulders within the feature.
- iii. General density and width of crevices or fractures across the outcrop.
- iv. Aspect/orientation of the outcrop.

d. Reference Sites

- i. When degraded areas do not permit site characterization in accordance with subsection G.4.b of this section, a reference site shall be selected and used as a proxy for desired conditions at the mitigation site.
- ii. Reference sites shall be used to determine appropriate plant species, size and density to be included in the mitigation plan.
- iii. Reference sites shall be located in the same watershed and carefully chosen to reflect similar habitat resources including vegetation qualities and abiotic characteristics such as elevation, topography, stream characteristics, and substrate. Reference sites are informative and suggestive rather than prescriptive. Characterization of reference sites shall use the sample methodology outlined herein.
- iv. Reference sites for riparian habitat impacts should include healthy, intact riparian habitat that is the same or higher riparian/xeroriparian classification and within the same watershed as that being impacted.
- v. Each reference site may include several sampling areas.

vi. Number of Reference Sites

- a) If the proposed impact area is less than one-quarter (1/4) acre in size and has been previously degraded or disturbed, at least one (1) reference site shall be selected for characterization.
- b) If the proposed impact area is between one-quarter (1/4) and five (5) acres in size and has been previously degraded or disturbed, at least two (2) reference sites shall be selected for characterization.
- c) For proposed impacts areas greater than five (5) acres that have been previously degraded or disturbed, at least three (3) reference sites shall be selected for characterization.

5. Mitigation Plan

- a. Mitigation plans shall be prepared by a qualified habitat restoration specialist. The requirement to use a qualified habitat restoration specialist is waived for mitigation plans prepared for single residential parcels.
- b. A mitigation plan shall include accurate information about resource elements present in the proposed impact area prior to such impacts and at any proposed mitigation area if different than impact area.
- c. Mitigation Plan Contents

The following information must be included in a mitigation plan:

- i. Aerial photograph at an appropriate scale with the following items clearly labeled:
 - a) Proposed project area, mitigation area, and reference area(s);
 - b) ESL resources;
 - c) Sampling entities;
 - d) Plot and/or transect locations, numerically labeled, to identify the plot relative to the data;
- ii. Results summary table with all species listed;
- iii. Evaluation of species diversity and vegetation cover;
- iv. Representative photographs of each sample entity;
- v. Planting plan, including specifications for the placement and relocation of rock and boulder features; and
- vi. Other supporting data and evidence as appropriate.
- d. Plant Density
 - i. For each area sampled, calculate the mean (average) number of individuals per species, based on the area of all plots or transects in that entity. For creating a planting plan, these values can be extrapolated to a meaningful area (e.g., one (1) acre or the size of the proposed disturbance) for each species as well as a total for

shrubs and trees. The mean value will be used to calculate the mitigation required, using the following formula:

$$\frac{\text{Total number of plants in all plots}}{\text{Total combined area of all plots}} = \frac{X \text{ plants per area of interest}}{\text{Area of interest}}$$

- ii. At a minimum, all mitigation areas should achieve a density of forty-five (45) trees per acre and one hundred (100) shrubs per acre.

Species and quantities of plant materials must be calculated based on density values obtained in the vegetation sampling of the reference site(s) as described below.

e. Plant Palette

- i. The specific plant palette should include native species that are present in the proposed impact area or reference site(s), as determined by the sampling techniques described above.
- ii. Historic flora may be consulted for additional species that may have occurred in the area in the past and that may be appropriate.
- iii. Plant materials must be selected to create a diverse native vegetation community that will have the greatest habitat value possible. This should include (as appropriate) species of trees, large and mid-sized shrubs, bunchgrasses, sub-shrubs, vines, and annuals that will provide a structurally diverse vegetation community with ample cover for a variety of wildlife.
- iv. Species selection must incorporate plant species that provide a variety of food resources for wildlife, including grains, berries, insects, pollen, and nectar.

f. Plant Size

Trees and shrub size shall reflect the average found in the transects. The following serve as minimum size requirements:

- i. Trees: Fifty percent (50%) at twenty-four (24) inch boxed and fifty percent (50%) at fifteen (15) gallon.
- ii. Shrubs: One hundred percent (100%) at five (5) gallon.

g. Planting, Rock and Boulder Design

- i. Container plants must be installed in natural-looking patterns that mimic the surrounding and reference areas and not in rows or grids. Planting design shall be detailed on the planting plan.
- ii. The placement of rock and boulder materials shall re-create the original character of the feature to the greatest practical extent. Rock and boulder placement shall be detailed on the planting plan.

h. Plant Material Quality

- i. Emphasis on plant materials shall be for restoration quality stock that is native and as local to the project area as possible and preferably from within the same watershed.

- ii. Plant materials may consist of salvaged plants or cuttings as well as container plants grown in traditional or tall pots from seed collected locally specifically for the project. Container plants will be grown at a nursery that specializes in producing high-quality native plant species for habitat restoration projects.
 - iii. Native soil shall be used in the plant containers if possible. If more native soil is needed than is available to fill plant containers, each container shall receive some native soil mixed with an appropriate commercial nursery soil mix.
 - iv. Container plants must be grown outdoors and in full sunlight. Prior to container plants being delivered to the project site, they shall be hardened off from water, so they may be able to sustain themselves under potential drought conditions once planted.
 - v. Deep-planting techniques for woody species are permitted in order to achieve maximum survival with minimal irrigation. This may include deep-planting of dormant pole cuttings as well as the use of container stock grown in tall pots.
 - vi. All plant materials shall be inspected by Town staff prior to installation to ensure they are healthy, disease free, and of proper species, quantities, and sizes.
- i. Seed Types
 - i. Seed labels, including origin, purity, and germination rates, shall be made available to Town staff for review and approval prior to application at the project site.
 - ii. The seed mix palette must include only native species that occur in the vicinity of the restoration mitigation area and that are appropriate for the site, as determined by vegetation sampling.
 - iii. The mix should include as many species as possible, and, as with the container plants, a diverse mix of structural habits. It is important to include species that germinate at different times of the year as a contingency if precipitation is below average during the first wet season and to provide cover throughout the year.
 - j. Seed Application

Seeds can be applied through a variety of methods, including hand-broadcasting, pelletization, pitting, and hydroseeding. Timing of application shall be coordinated with precipitation for the greatest likelihood of germination success.
6. Off-Site Mitigation
- a. Location
 - i. Mitigation may be proposed on site or off site subject to Planning and Zoning Administrator approval. On-site mitigation is appropriate when impacts are temporary such as disturbance for a utility right-of-way. Off-site mitigation may be proposed if impacts will be permanent.
 - ii. Appropriate off-site mitigation locations include areas adjacent or in close proximity to the impacted area that contain similar resource elements such as areas upstream along the same riparian corridor where the impact occurred, or areas where resources have previously been degraded or disturbed.

- iii. The location of the proposed mitigation area should consider the following items:
- a) Proximity and connectivity to other resource elements within and adjacent to the parcel containing the mitigation area.
 - b) Soil and landscape characteristics.
 - c) Hydrology.
 - d) Zoning and long-term protection.
 - e) Access and logistical concerns.
 - f) Land use history.

(Ord. (O)11-01, Added, 2/16/11)