RANCHO VISTOSO PARCEL 5-R PAD AMENDMENT SITE ANALYSIS

(CASE #2300042 GPA / #2300043 PAD AMENDMENT)



PREPARED FOR:

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IN COLLABORATION WITH:







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I. INTRODUCTION

A. PROJECT OVERVIEW

This application proposes the construction of a single-family residential neighborhood located at the southern end of Moore Loop, approximately one-quarter mile east of the intersection of Rancho Vistoso Boulevard and Moore Loop in Oro Valley, Arizona. The subject property (the "Property") consists of 36.3± acres and is currently undeveloped. The Your Voice Our Future General Plan designates most of the Property as "School", with a small band of "Open Space" along its western and southwestern boundary. The Property is surrounded by single-family residential subdivisions to the north and west, neighborhood commercial to the south, and open space containing Big Wash to the east.

The Property was originally zoned Rancho Vistoso Planned Area Development (PAD) Medium-High Density Residential (MHDR) but was amended to Cultural / Institutional in 2009 (OV11-08-04 & R09-82) in response to Amphi School District's request to relocate the planned school site in Neighborhood 5 from Parcel 5-H to this Property (Parcel 5-R). Amphi no longer owns the Property, so now it is proposed to revert back to residential, but only to Medium Density Residential (MDR), like the surrounding neighborhoods, not MHDR as originally zoned. Since the General Plan is predated by the PAD the General Plan's land uses within the PAD are simply a reflection of the underlying zoning rather than a unique long-range plan. The 2009 amendment, which was due to a change in conditions, was reflected in the 2016 General Plan update. By approving and ratifying the General Plan's land uses within the PAD, Oro Valley's Town Council and voters simply validated the PAD's original vision and numerous subsequent revisions including the 2009 amendment. The reversion of this Property's ownership from Amphi back to the original developers of Rancho Vistoso represents a change in conditions that warrants another amendment to the PAD's original vision.

This document has been prepared in support of a request to rezone the Property from Rancho Vistoso PAD Cultural / Institutional to Medium Density Residential. This will allow for the construction of a single-family residential development. A corresponding General Plan amendment from School to Medium Density Residential has been requested concurrently with this PAD amendment.

B. PRIMARY OBJECTIVES

This proposal will provide much needed high-quality, energy efficient, single-family detached homes for new and existing residents wishing to live or relocate in the Town of Oro Valley. Very strong demand for new housing options continues to exist in this northern part of the greater Tucson metropolitan area, despite the recent uptick in mortgage interest rates. Primary objectives of this proposal include:

- Construct a residential community that is compatible with existing surrounding land uses.
- Provide additional customers for local businesses, which also bolsters Oro Valley's tax base.
- Cluster homes in such a way to preserve the steep slopes onsite and provide natural open space along the Big Wash so that future residents of the development can enjoy the natural desert landscape.



II. INVENTORY & ANALYSIS

The purpose of the Inventory & Analysis section of this document is to catalog the various developmental opportunities and constraints impacting the property in order to provide a meaningful and relevant context for the development proposal detailed in Section III of this document. Through careful consideration of these existing conditions a design can be deemed compatible with its surroundings and appropriate for the area.

A. EXISTING LAND USES

1. Regional Context

The Property subject to this rezoning request consists of 36.3± acres located in the Town of Oro Valley in Section 31, Township 11 south, Range 14 east, and Section 36, Township 11 south, Range 13, Pima County, Arizona. The site is located at the southeast edge of Moore Loop, approximately one-quarter mile east of the intersection of Rancho Vistoso Boulevard and Moore Loop. The Pima County Tax Assessor designates the subject property as portions of parcel numbers 219-20-914B and 219-54-006D. See Exhibit II-A-1: Site Location Map.

The Project's administrative address will be assigned during the platting phase.

2. Existing Onsite Land Uses, Zoning & General Plan

The Property is currently undeveloped and vacant. See Exhibit II-A-2: Existing Land Uses.

The Property is currently zoned CI (Cultural / Institutional) within the Rancho Vistoso PAD.

The Your Voice Our Future General Plan designates most of the Property as School, with a small band along the western and southwestern boundary designated as Open Space. To move forward with this project as proposed, a General Plan amendment from School to Medium Density Residential (MDR) has also been requested.



3. Existing Adjacent Zoning and Land Uses

i. Surrounding Zoning & Land Uses

The Property is surrounded by properties featuring the following zoning designations and land uses.

N: Zoning: PAD Medium Density Residential & PAD Open Space

Land Use: Valley Vista Single-Family Residential Subdivision

NE: Zoning: PAD Open Space

Land Use: Undeveloped Land (Big Wash)

E: Zoning: PAD Open Space

Land Use: Undeveloped Land (Big Wash)

SE: Zoning: PAD Open Space

Land Use: Undeveloped Land (Big Wash)

S: Zoning: PAD C-1 Community Commercial and PAD Open Space

Land Use: Safeway Vistoso Plaza Shopping Center and Undeveloped Land

SW: Zoning: PAD C-1 Community Commercial, PAD High Density Residential,

and PAD Open Space

Land Use: Horizons Single-Family Residential Subdivision and Undeveloped Land

W: Zoning: PAD High Density Residential and PAD Open Space

Land Use: Horizons Single-Family Residential Subdivision

and Rancho Vistoso Office Park

NW: Zoning: PAD High Density Residential and PAD Open Space

Land Use: Vistoso Hills Single-Family Residential Subdivision

ii. Surrounding Building Heights

Surrounding building heights vary between one and two story.

iii. Nearby Pending Rezonings

The Avilla Rancho Vistoso east parcel (Parcel 5-U) is approximately 500-feet to the west of this project and the Avilla Rancho Vistoso west parcel (Parcel 7-I) is approximately one-half mile to the west of this project. Both Avilla Rancho Vistoso parcels are currently going through the rezoning process.

iv. Nearby Conditionally Approved Rezonings

There are no conditionally approved rezonings within one-quarter mile of the Property.

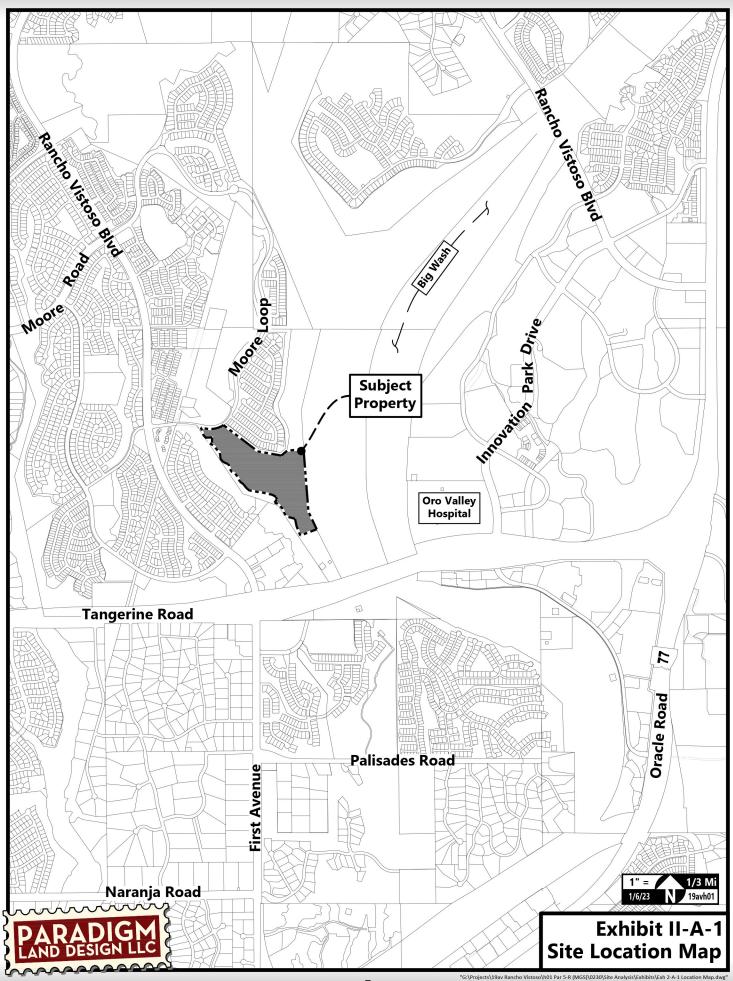
v. Nearby Approved Subdivisions & Development Plans

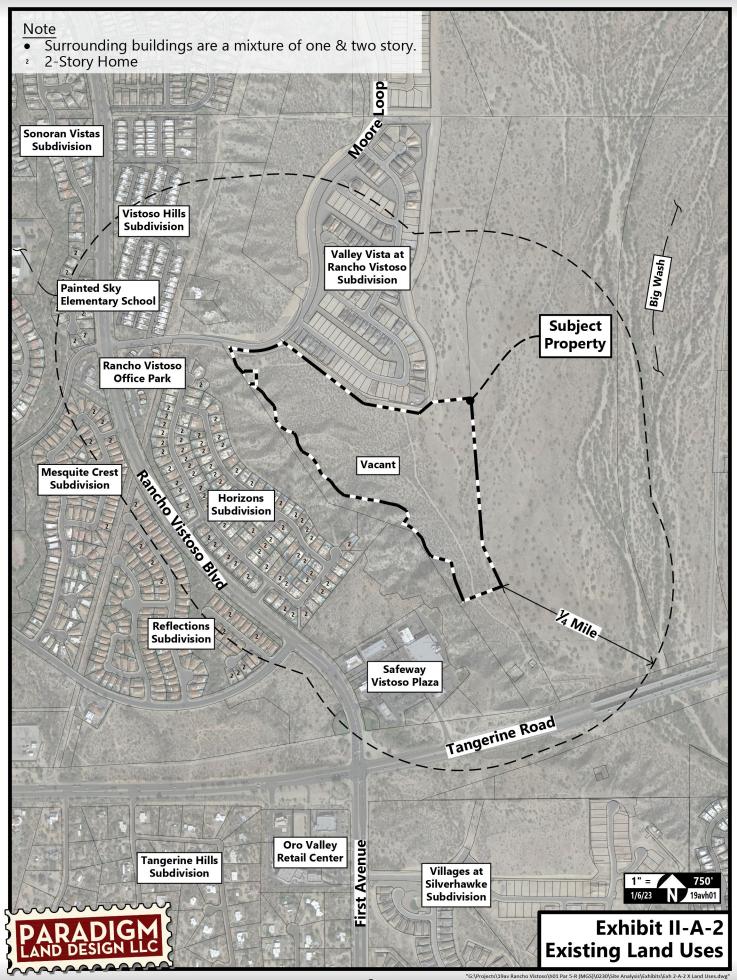
Valley Vista at Rancho Vistoso is the most recently approved nearby subdivision and is nearing completion of construction. It is directly north of the subject property.

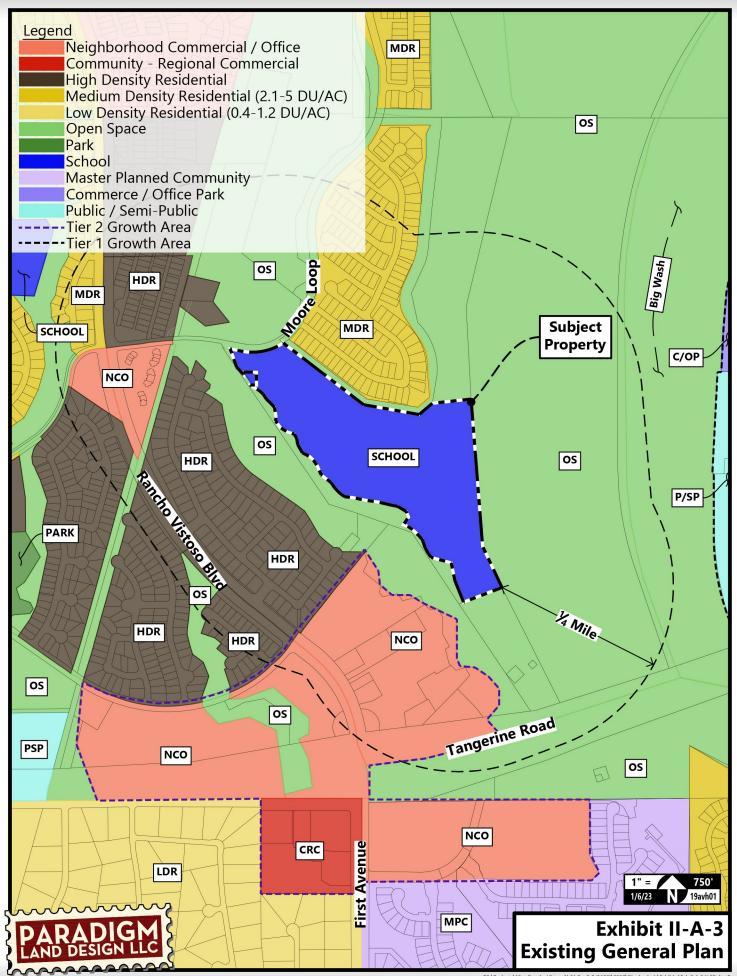


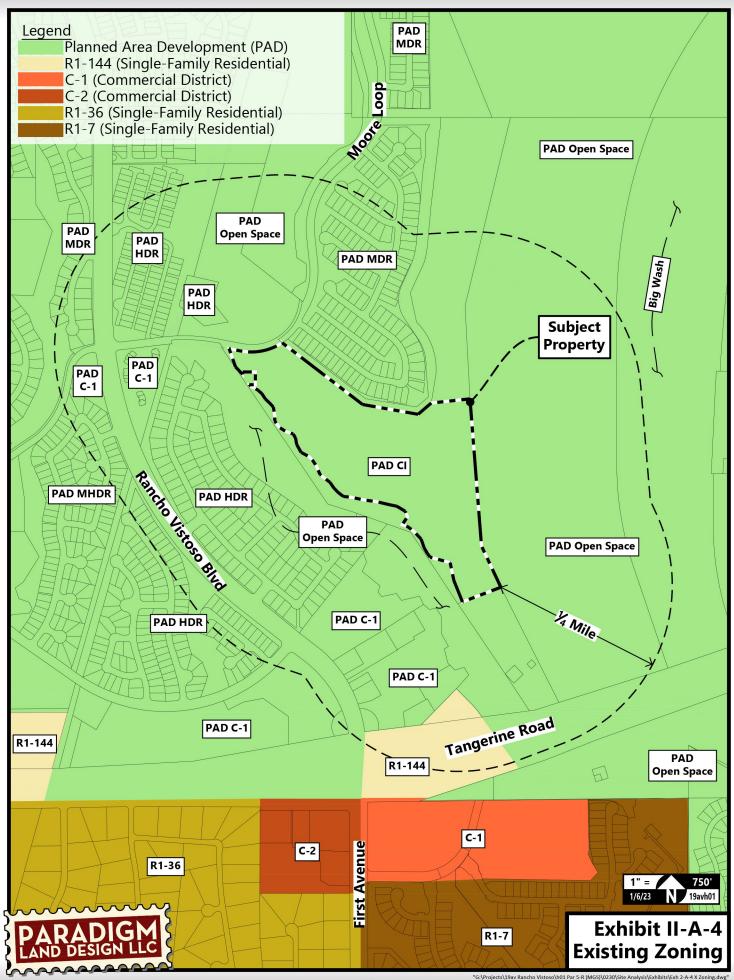
vi. Architectural Styles used in Adjacent Properties

The architectural styles used in adjacent residential projects are mainly wood frame or block construction that utilize a stucco and/or stone veneer and have either a flat or tiled roof. The commercial and office buildings nearby also utilize stucco with stone veneer and flat roofs with some tile overhangs.









B. ENVIRONMENTALLY SENSITIVE LANDS (ESL)

1. ESL Categories Onsite

ESL does not apply to this parcel because over 25% of Rancho Vistoso has been developed with infrastructure or finished building pads.

The 2009 PAD amendment affecting the Property included a condition of approval implementing some protections for the pre-ESLO 8.28-acre mapped riparian area existing onsite as shown on Exhibit III-A-1: Tentative Development Plan. That riparian boundary was later adopted as the boundary of the ESLO's Major Wildlife Linkage area.

2. Additional ESL Characteristics

There are no regulated rock outcrops, distinctive native plant stands, or distinctive individual native plants on the subject property.

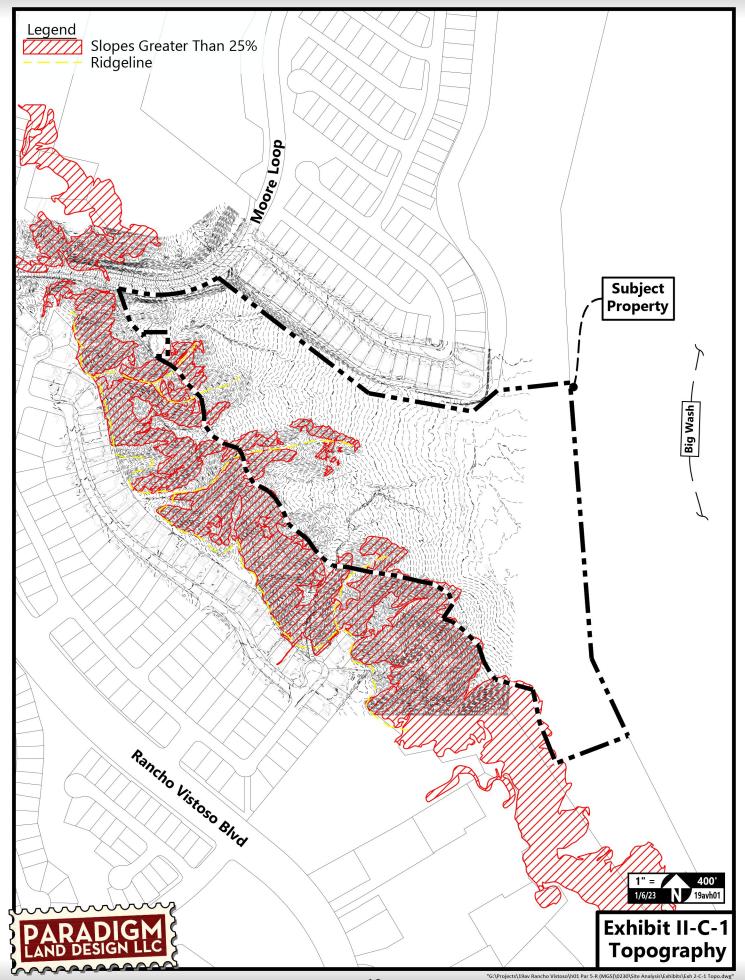
3. Total Acreage Present Onsite for each Conservation Category

Conservation Category	Acreage
Major Wildlife Linkage	8.28
Critical Resource Area	0
Core Resource Area	0
Resource Management Area Tier 1	28.03
Resource Management Area Tier 2	0
Resource Management Area Tier 3	0

C. TOPOGRAPHY

The topography of the Property is generally characterized by relatively flat terrain within the northeastern portions of the site, with hillsides in the southwestern portions rising above the rest of the Property. The Rancho Vistoso PAD regulates slopes above 25% rather than the 15% slope threshold normally regulated by Town Code. Approximately 2.2 acres of regulated 25% slopes exist within the hillsides in the western portions of the Property. The hillsides rise 50'-75' above the flatter portions of the Property, with the Horizons subdivision perched atop. The Property generally slopes downward from west to the east towards Big Wash. Elevations range from approximately 2,795 feet above sea level near the northwestern corner of the property to approximately 2,696 feet above sea level near the southeastern corner of the property. The Property does not contain any hillside conservation areas, rock outcrops, or other significant topographic features. See Exhibit II-C-1: Topography.

Topographic Feature Category	Acreage
>25%	2.2±
Ridgelines	0
Rock Outcrops & Boulders	0



D. CULTURAL / ARCHAEOLOGICAL / HISTORIC RESOURCES

The subject property was previously surveyed in 1986 by the Institute for American Research (IAR), as part of the "Rancho Vistoso Survey", which covered about 7,700 acres and documented 54 archaeological sites throughout Rancho Vistoso. No sites were recorded within the subject property. A more recent survey was conducted by SWCA Environmental Consultants (SWCA) in 2007, which located one archaeological site, designated AZ BB:9:417 (ASM) and one isolated occurrence. Because this survey was conducted more than ten years ago, the site was resurveyed by SWCA for a second time in July 2022. This current survey was unable to locate the previously identified archaeological site as it was most likely within the newly constructed Moore Loop right-of-way. No other archaeological resources were identified within the subject property during this re-survey.

No further archaeological study of the project area is recommended. In the unlikely event that buried archaeological features or human remains are unearthed during construction, all work should stop in the immediate vicinity of the discovery and an archaeologist should be contacted to verify the discovery and assess its significance.



343 West Franklin Street Tucson, Arizona 85701 Tel 520.325.9194 Fax 520.325.2033

July 11, 2022

Mark Winkleman MGS Vistoso LLC 7117 East Rancho Vista Drive, Suite 6003 Scottsdale, Arizona 85251

Re: Cultural Resources Study for Rancho Vistoso Parcel 5-R, Town of Oro Valley, Pima County, Arizona / SWCA Project No. 71592

Dear Mr. Winkleman:

At your request, SWCA Environmental Consultants (SWCA) conducted a cultural resources study for the Rancho Vistoso Parcel 5-R project area, south of North Moore Loop, town of Oro Valley, Pima County, Arizona. The project area consists of approximately 22 acres of private land in Section 36, Township (T) 11 South (S), Range (R) 13 East (E) and Section 31, T11S, R14E, Gila and Salt River Baseline and Meridian (Figure 1). The parcel is currently undeveloped (Figure 2). The survey was conducted to address the Town of Oro Valley's requirements that impacts on cultural resources, including archaeological sites, be considered when private land is developed.

PREVIOUS RESEARCH

SWCA consulted the AZSITE database, which compiles records from the Bureau of Land Management (BLM), Arizona State University, and Arizona State Museum (ASM), to identify previously conducted surveys and previously recorded sites in the project area. Four previous projects were identified intersecting the current project area. One previously recorded archaeological site has been documented within the project area.

All the current project area is within the area surveyed in 1986 by the Institute for American Research (IAR) in preparation for the development of the Rancho Vistoso master-planned community (ASM Accession Number 1986-220.ASM). Several significant Hohokam habitation sites were recorded within the Rancho Vistoso Development, including Sleeping Snake Village, Honey Bee Village, and the Triangle Road Site. The IAR survey data are more than 30 years old. The survey was conducted in systematic transects, spaced 20 m apart (although a hand-written note on the scanned ASM Project Registration Form, shown on the AZSITE database, suggests coverage was less intense over rough terrain). More recent projects within the Rancho Vistoso Development Survey area have identified additional archaeological sites, indicating that sites may have been missed in 1986, or have become exposed through time. The State Historic Preservation Office has issued guidance for evaluating old

¹ Craig, Douglas B., and Henry D. Wallace (1987). Prehistoric Settlement in the Cañada del Oro Valley, Arizona: the Rancho Vistoso Stavey Project. Anthropological Papers No. 8. Institute for American Research, Tucson, Arizona.

² Petersen, Eiric (2014), Rancho Vistoso Neighborhood 5 Archaeological Due Diligence. Letter Report. Project No. 28770. SWCA Environmental Consultants, Tucson, Arizona.

E. HYDROLOGY

This section of the site analysis describes onsite and offsite hydrologic and hydraulic characteristics and is based on information provided by The WLB Group, Inc.

1. Offsite Watersheds Affecting, or Affected by, the Site

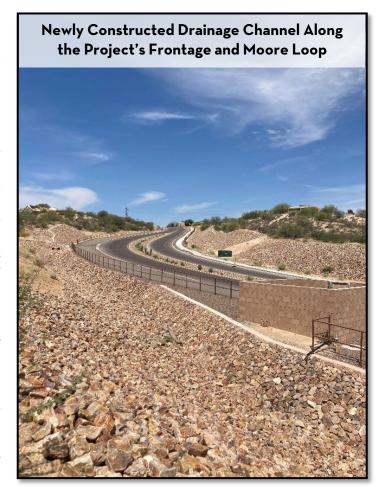
There are five offsite watersheds impacting the Property. They originate within the hillside and subdivision southwest of the Property. The natural terrain consists of native desert vegetation. Surface runoff associated with the watersheds drains northeast and discharges into Big Wash within the easternmost portion of the Property.

2. Balanced & Critical Basins

Per the Town of Oro Valley Drainage Criteria Manual, the entire town is classified as a critical basin. Stormwater retention is not permitted within the Town. The project is directly adjacent to a public wash (Big Wash) and the outflow introduced by the proposed development will not affect the peak flow rate within Big Wash. Typical detention requirements may therefore be waived as the entire project site discharges directly to Big Wash.

Significant Offsite Features Affecting or Affected by the Property

One of the offsite upstream watersheds includes area within an existing residential development (Horizons Subdivision) located south of the project site. During a 1% annual chance storm event surface runoff exits the subdivision at a northeast cul-de-sac (Bridal Veil Falls Road) and discharges approximately 72.4 cubic feet per second (CFS) into a manmade improved drainageway, draining northeast onto the Property. The drainageway is currently damaged. Bogardus Engineering is conducting a study and design to repair the structure. Following this rezoning this project will provide a drainage easement to the Vistoso Community Association to accommodate the improvements proposed by Bogardus to benefit the Horizons subdivision. Additionally, a drainage channel runs down along the Property's frontage on the southwest edge of Moore Loop. The channel then flows under Moore Loop to a drainage basin. See Exhibit II-E-1: Onsite Hydrology Characteristics.



4. Area of Upstream Watersheds Greater than 100 CFS

Five individual offsite watersheds affect the Property, all of which generate less than 100 CFS at their respective concentration points along the Property's upstream boundary. See Exhibit II-E-1: Onsite Hydrology Characteristics.

5. Location / Ownership of Well Sites within 100' of the Site

According to the Arizona Department of Water Resources there is one well within 100 feet of the Property. It is Number 55-543853 registered to the Town of Oro Valley and is located near the northwest corner of the Property.

6. Onsite Hydrology Characteristics

Six existing onsite watersheds have been delineated on the project site with onsite runoff draining to the north and east. Two of the northernmost watersheds discharge surface runoff into a manmade swale along the southern edge of the Valley Vista subdivision. The combined flow of 41.2 CFS is conveyed to the east, discharging to Big Wash. The proposed development will only be allowed to discharge 41.2 CFS into the aforementioned swale after design/construction.

The remaining four watersheds generate surface runoff which drain to the east directly into Big Wash.

Hydrologic analysis has been performed using the Pima County Flood Peak Discharge Procedure V7.2. Soil types were obtained from Pima Maps and are comprised of 41 % "B", 41 % "C" and 18 % "D". The vegetative cover and density have been determined using recent aerial photography.

i. 100-year Floodplains with Peak Discharges · 50 CFS

The Property contains two watersheds which generate 100-year peak discharges greater than 50 CFS. The associated floodplains were determined using Bentley FlowMaster V8.i computer program. See Exhibit II-E-1:.

ii. Areas of Sheet Flooding and Average Depths

The Property is not subject to sheet flooding.

iii. Federally mapped floodways and floodplains

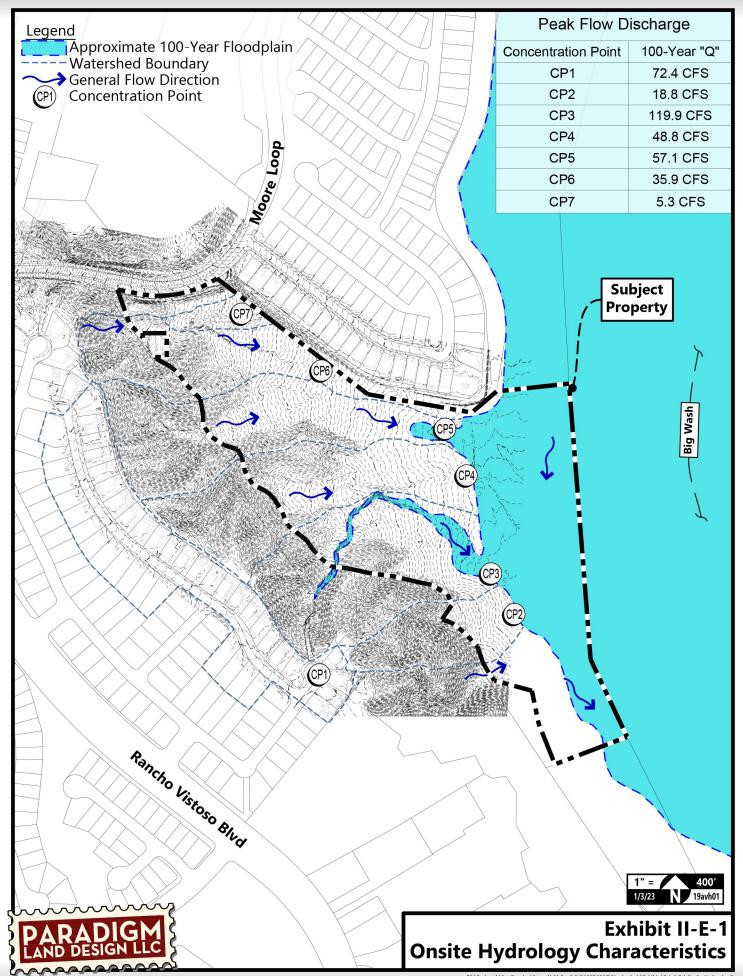
Per the current FEMA Flood Insurance Rate Map (FIRM) Panel 04019C1090L, dated June 16, 2011, with a Letter of Map Revision (LOMR) dated November 19, 2020, the majority of the project site is located in a Zone X (areas determined to be outside the 0.2% annual chance floodplain). An approximately 11.2-acre area in the eastern portion of the project site is located within the Big Wash floodplain, which has been designated a Special Flood Hazard area (SFHA) Zone A with No Base Flood Elevations (BFE) determined. A Zone A designation indicates that no detailed study has been processed through FEMA; therefore, there is no floodway associated with Big Wash. See Exhibit II-E-2: FEMA FIRM Map.

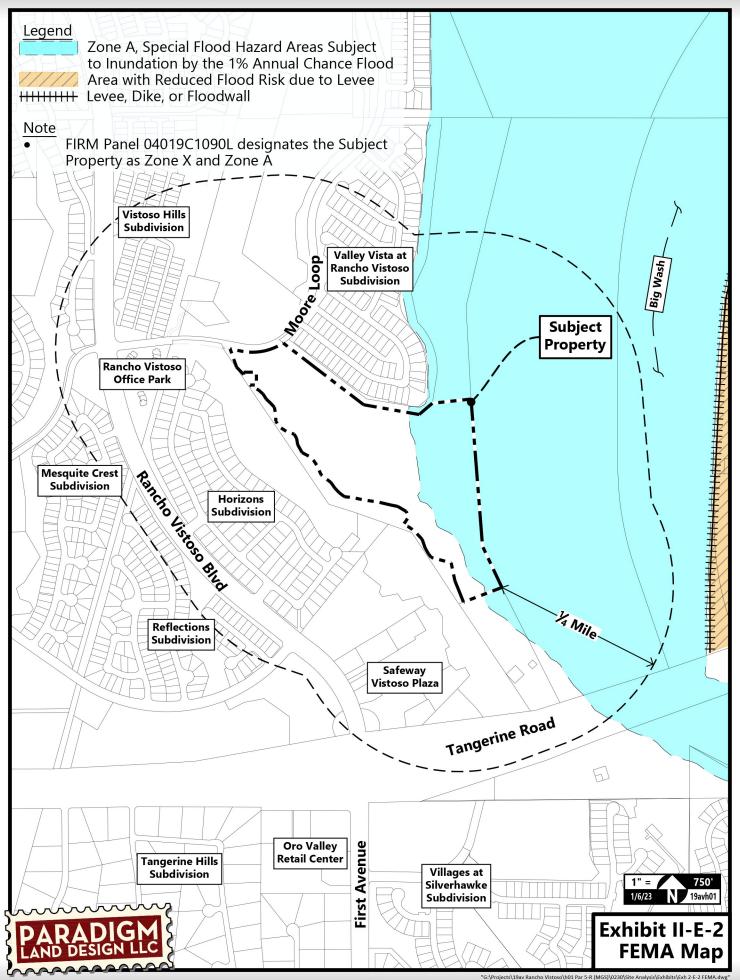
iv. Calculation of all 100-year peak discharges exceeding 50 CFS

The two onsite watersheds generating 100-year peak flows exceeding 50 CFS contribute approximately 57.1 CFS and 119.9 CFS respectively at the eastern downstream concentration points along Big Wash.

7. Existing Drainage Conditions along the Downstream Property Boundary

The existing downstream outflows discharging to Big Wash drain east and then south in a natural condition. Big Wash flows south to the Tangerine Road Bridge and is conveyed beneath the roadway. Bank protection has been constructed along the west bank of Big Wash upstream of the Tangerine Road Bridge (downstream of the project site).





F. VEGETATION

1. Onsite Vegetative Communities

The vegetation community on the property is typical of the Sonoran Desertscrub Paloverde-Mixed Cacti, which includes Palo Verde, Mesquite, Acacia, Saguaro, Cholla, Prickly Pear, and Barrel Cactus.

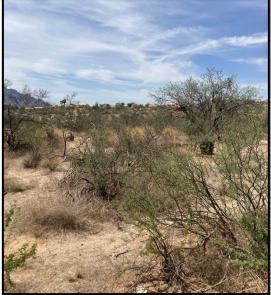


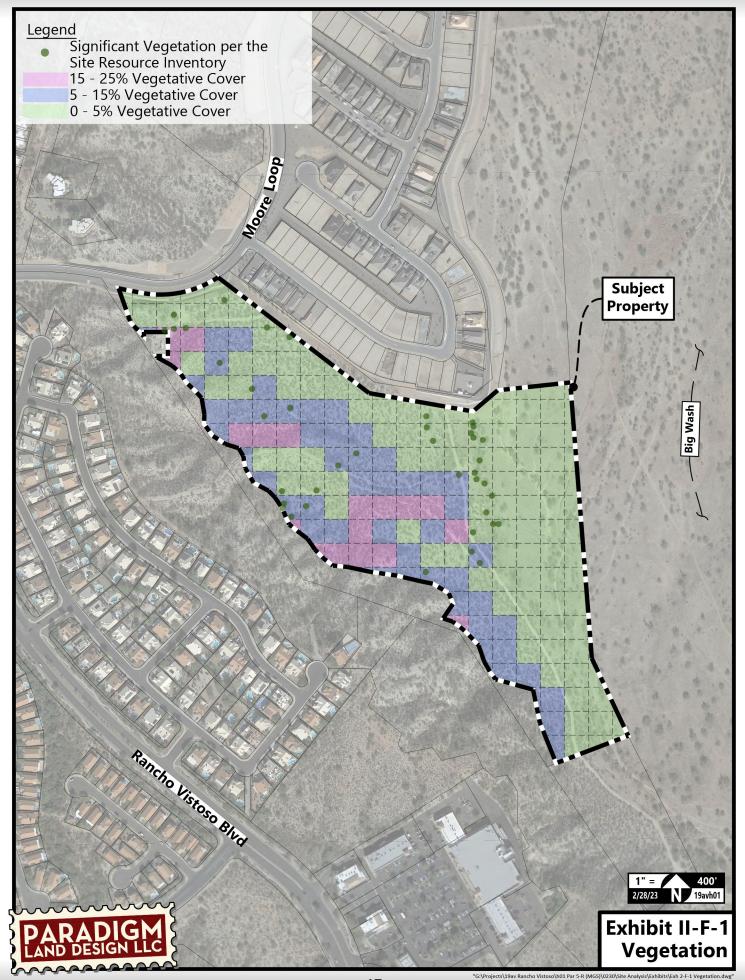
2. Significant, Threatened, or Endangered Flora

No threatened or endangered flora are known to exist onsite. 35 healthy individual plants meet Oro Valley's definition of "significant" and are shown on the site resource inventory. These include 7 Foothill Palo Verde trees, 27 Velvet Mesquite trees, and 1 Whitethorn Acacia tree. Mitigation for disturbance of these trees will include installation of 70 new trees and 350 understory plants. See Appendix A: Site Resource Inventory.

3. Vegetative Densities

Vegetative density of the Property is approximately 60% plant cover. See Exhibit II-F-1: Vegetation.





G. WILDLIFE

The Arizona Game and Fish Department's online review tool has been consulted, and the Environmental Review report, dated June 22, 2022, indicates that several federally listed species have been known to exist in the vicinity of this development. Any protected species encountered onsite will be handled according to applicable regulatory criteria. See Exhibit II-G-1: AZGFD Report.



Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Rancho Vistoso Neighborhood 5 Parcel R

User Project Number:

19avh01

Project Description:

Single-family residential development consisting of ~56 lots

Project Type:

Development Within Municipalities (Urban Growth), Residential subdivision and associated infrastructure, New construction

Contact Person:

Clay Goodwin

Organization:

Paradigm Land Design LLC

On Behalf Of:

CONSULTING

Project ID:

HGIS-16626

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Page 1 of 13

Arizona Game and Fish Department Project ID: HGIS-16626

project_report_rancho_vistoso_neighborhood_51813_53459.pdf Review Date: 6/22/2022 08:13:28 AM

Disclaimer:

- 1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
- 2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
- 3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
- 4. HabiMap Arizona data, specifically Species of Greatest Conservation Need (SGCN) under our State Wildlife Action Plan (SWAP) and Species of Economic and Recreational Importance (SERI), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

Locations Accuracy Disclaimer:

Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Arizona Game and Fish Department Project ID: HGIS-16626

project_report_rancho_vistoso_neighborhood_51813_53459.pdf Review Date: 6/22/2022 08:13:28 AM

Recommendations Disclaimer:

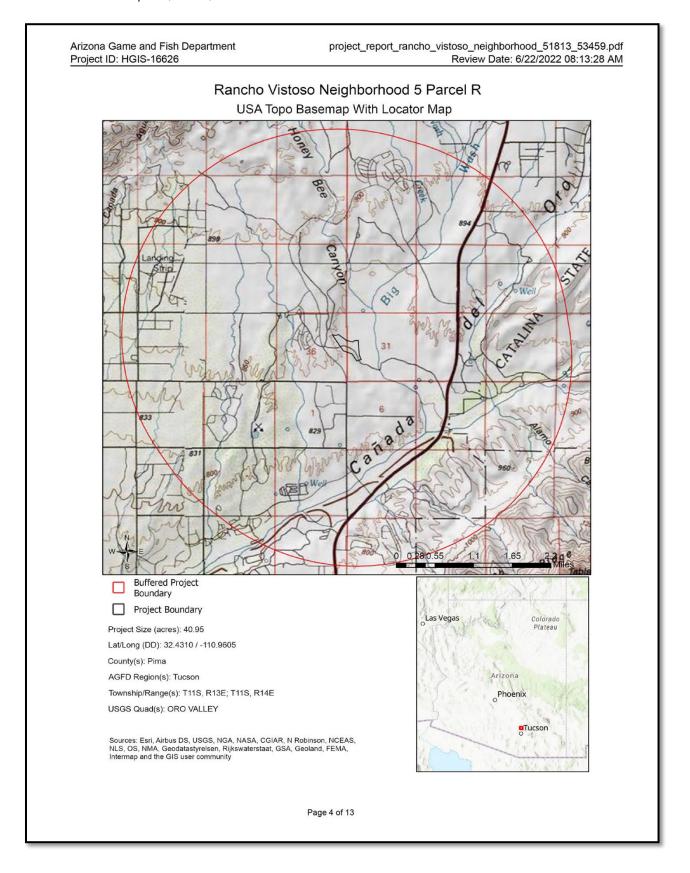
- The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
- Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
- 3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
- 4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
- 5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:

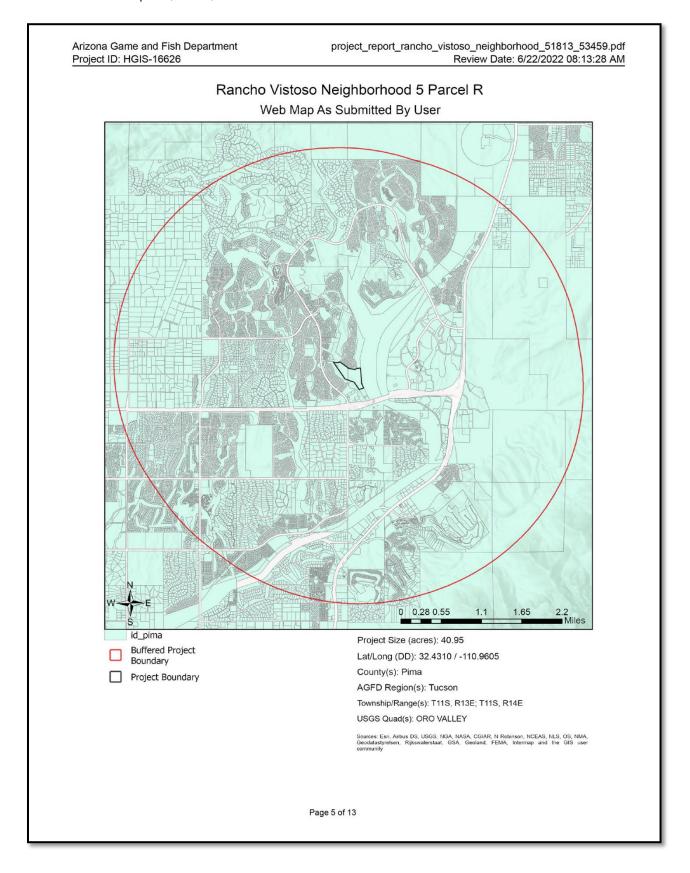
Project Evaluation Program, Habitat Branch Arizona Game and Fish Department 5000 West Carefree Highway Phoenix, Arizona 85086-5000 Phone Number: (623) 236-7600 Fax Number: (623) 236-7366

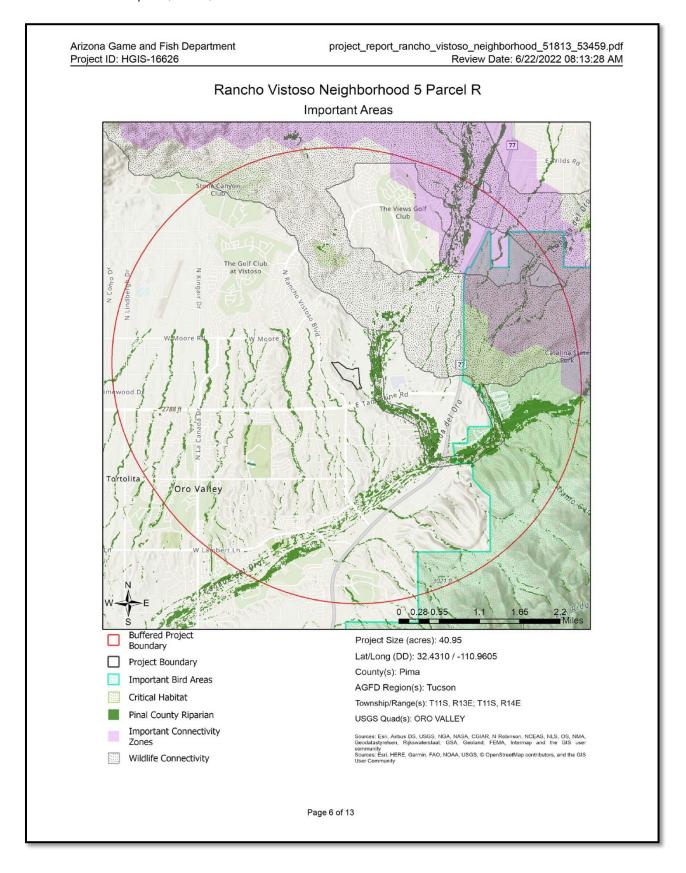
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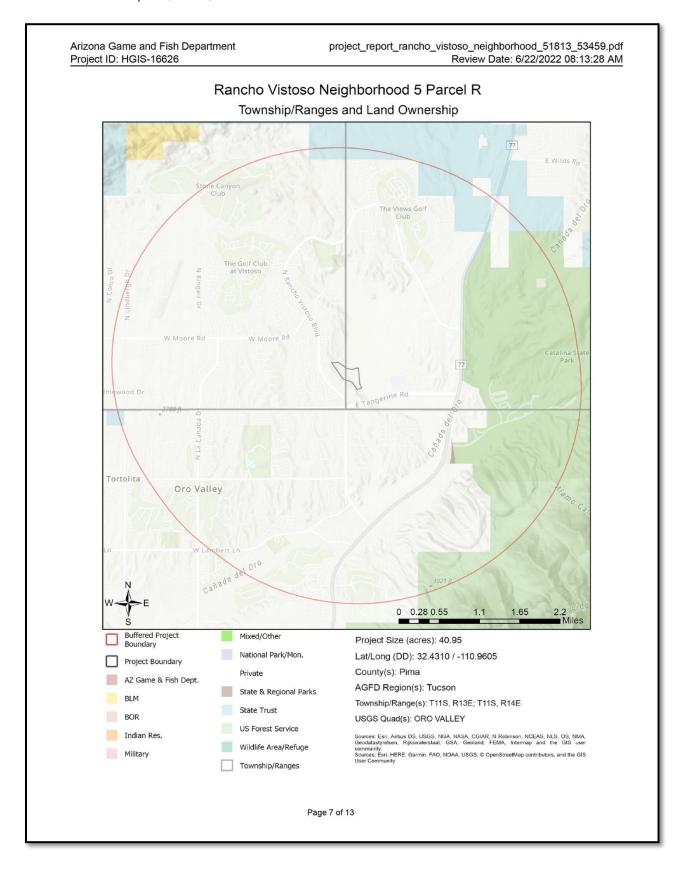
PEP@azgfd.gov

Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies









Arizona Game and Fish Department Project ID: HGIS-16626

project_report_rancho_vistoso_neighborhood_51813_53459.pdf Review Date: 6/22/2022 08:13:28 AM

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Abutilon parishii	Pima Indian Mallow	SC	S	S	SR	
Aspidoscelis stictogramma	Giant Spotted Whiptail	SC	S			1B
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1A
Empidonax traillii extimus	Southwestern Willow Flycatcher	LE				1A
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1A
Glaucidium brasilianum cactorum	Cactus Ferruginous Pygmy-owl	PT	S	S		1B
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1A
Heloderma suspectum	Gila Monster					1A
Lepus alleni	Antelope Jackrabbit					1B
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S		1A
Terrapene ornata luteola	Desert Box Turtle			S		1A

Note: Status code definitions can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Riparian Area	Riparian Area					

 $Note: Status\ code\ definitions\ can\ be\ found\ at\ \underline{https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/defi$

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Aix sponsa	Wood Duck					1B
Ammospermophilus harrisii	Harris' Antelope Squirrel					1B
Anthus spragueii	Sprague's Pipit	SC				1A
Antrostomus ridgwayi	Buff-collared Nightjar		S			1B
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Aspidoscelis stictogramma	Giant Spotted Whiptail	SC	S			1B
Aspidoscelis xanthonota	Red-backed Whiptail	SC	S			1B
Botaurus lentiginosus	American Bittern					1B
Calypte costae	Costa's Hummingbird					1C
Chilomeniscus stramineus	Variable Sandsnake					1B
Colaptes chrysoides	Gilded Flicker			S		1B
Coluber bilineatus	Sonoran Whipsnake					1B
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC	S	S		1B
Crotalus tigris	Tiger Rattlesnake					1B
Cynanthus latirostris	Broad-billed Hummingbird		S			1B
Dipodomys spectabilis	Banner-tailed Kangaroo Rat			S		1B

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Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Empidonax wrightii	Gray Flycatcher					1C
Euderma maculatum	Spotted Bat	SC	S	S		1B
Eumops perotis californicus	Greater Western Bonneted Bat	SC		S		1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1A
Glaucidium brasilianum cactorum	Cactus Ferruginous Pygmy-owl	PT	S	S		1B
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1A
Haliaeetus leucocephalus	Bald Eagle	SC, BGA	S	S		1A
Heloderma suspectum	Gila Monster					1A
Incilius alvarius	Sonoran Desert Toad					1B
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		1B
Lasiurus blossevillii	Western Red Bat		S			1B
Lasiurus xanthinus	Western Yellow Bat		S			1B
Leopardus pardalis	Ocelot	LE				1A
Leptonycteris yerbabuenae	Lesser Long-nosed Bat	SC				1A
Lepus alleni	Antelope Jackrabbit					1B
Macrotus californicus	California Leaf-nosed Bat	SC		S		1B
Melanerpes uropygialis	Gila Woodpecker					1B
Meleagris gallopavo mexicana	Gould's Turkey		S			1B
Melospiza lincolnii	Lincoln's Sparrow					1B
Melozone aberti	Abert's Towhee		S			1B
Micrathene whitneyi	Elf Owl					1C
Micruroides euryxanthus	Sonoran Coralsnake					1B
Myiarchus tyrannulus	Brown-crested Flycatcher					1C
Myotis occultus	Arizona Myotis	SC		S		1B
Myotis velifer	Cave Myotis	SC		S		1B
Myotis yumanensis	Yuma Myotis	SC				1B
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					1B
Oreoscoptes montanus	Sage Thrasher					1C
Oreothlypis luciae	Lucy's Warbler					1C
Panthera onca	Jaguar	LE				1A
Peucaea carpalis	Rufous-winged Sparrow					1B
Phrynosoma solare	Regal Horned Lizard					1B
Phyllorhynchus browni	Saddled Leaf-nosed Snake					1B
Progne subis hesperia	Desert Purple Martin			S		1B
Setophaga petechia	Yellow Warbler					1B
Sphyrapicus nuchalis	Red-naped Sapsucker					1C
Spizella breweri	Brewer's Sparrow					1C
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B

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Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Thomomys umbrinus intermedius	Southern Pocket Gopher					1B
Toxostoma lecontei	LeConte's Thrasher			S		1B
Troglodytes pacificus	Pacific Wren					1B
Vireo bellii arizonae	Arizona Bell's Vireo					1B
Vulpes macrotis	Kit Fox	No Status				1B

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Odocoileus hemionus	Mule Deer					
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Development Within Municipalities (Urban Growth), Residential subdivision and associated infrastructure, New construction

Project Type Recommendations:

Fence recommendations will be dependent upon the goals of the fence project and the wildlife species expected to be impacted by the project. General guidelines for ensuring wildlife-friendly fences include: barbless wire on the top and bottom with the maximum fence height 42", minimum height for bottom 16". Modifications to this design may be considered for fencing anticipated to be routinely encountered by elk, bighorn sheep or pronghorn (e.g., Pronghorn fencing would require 18" minimum height on the bottom). Please refer to the Department's Fencing Guidelines located on Wildlife Friendly Guidelines page, which is part of the Wildlife Planning button at https://www.azqfd.com/wildlife/planning/wildlifequidelines/.

During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use. Use only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used as often as possible to lower the range of species affected by lighting. All lighting should be shielded, canted, or cut to ensure that light reaches only areas needing illumination.

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Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at https://www.invasivespeciesinfo.gov/unitedstates/az.shtml and the Arizona Native Plant Society https://aznps.com/invas for recommendations on how to control. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives - a national cloud-based application for tracking and managing invasive species at https://imap.natureserve.org/imap/services/page/map.html.

To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of
interest, and select "See What's Here" for a list of reported species. To export the list, you must have an
account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv
file.

The construction or maintenance of water developments should include: incorporation of aspects of the natural environment and the visual resources, maintaining the water for a variety of species, water surface area (e.g., bats require a greater area due to in-flight drinking), accessibility, year-round availability, minimizing potential for water quality problems, frequency of flushing, shading of natural features, regular clean-up of debris, escape ramps, minimizing obstacles, and minimizing accumulation of silt and mud.

Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (include spawning seasons), and to reduce spread of exotic invasive species. We recommend early direct coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

Based on the project type entered, coordination with State Historic Preservation Office may be required (http://azstateparks.com/SHPO/index.html).

Trenches should be covered or back-filled as soon as possible. Incorporate escape ramps in ditches or fencing along the perimeter to deter small mammals and herptefauna (snakes, lizards, tortoise) from entering ditches.

Communities can actively support the sustainability and mobility of wildlife by incorporating wildlife planning into their regional/comprehensive plans, their regional transportation plans, and their open space/conservation land system programs. An effective approach to wildlife planning begins with the identification of the wildlife resources in need of protection, an assessment of important habitat blocks and connective corridors, and the incorporation of these critical wildlife components into the community plans and programs. Community planners should identify open spaces and habitat blocks that can be maintained in their area, and the necessary connections between those blocks to be preserved or protected. Community planners should also work with State and local transportation planning entities, and planners from other communities, to foster coordination and cooperation in developing compatible development plans to ensure wildlife habitat connectivity. The Department's guidelines for incorporating wildlife considerations into community planning and developments can be found on the Wildlife Friendly Guidelines portion of the Wildlife Planning page at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

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Design culverts to minimize impacts to channel geometry, or design channel geometry (low flow, overbank, floodplains) and substrates to carry expected discharge using local drainages of appropriate size as templates. Reduce/minimize barriers to allow movement of amphibians or fish (e.g., eliminate falls). Also for terrestrial wildlife, washes and stream corridors often provide important corridors for movement. Overall culvert width, height, and length should be optimized for movement of the greatest number and diversity of species expected to utilize the passage. Culvert designs should consider moisture, light, and noise, while providing clear views at both ends to maximize utilization. For many species, fencing is an important design feature that can be utilized with culverts to funnel wildlife into these areas and minimize the potential for roadway collisions. Guidelines for culvert designs to facilitate wildlife passage can be found on the home page of this application at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Based on the project type entered, coordination with Arizona Department of Environmental Quality may be required (http://www.azdeq.gov/).

Based on the project type entered, coordination with Arizona Department of Water Resources may be required (https://new.azwater.gov/).

Based on the project type entered, coordination with U.S. Army Corps of Engineers may be required (http://www.usace.army.mil/)

Based on the project type entered, coordination with County Flood Control district(s) may be required.

Development plans should provide for open natural space for wildlife movement, while also minimizing the potential for wildlife-human interactions through design features. Please contact Project Evaluation Program for more information on living with urban wildlife at PEP@azgfd.gov or

at https://www.azqfd.com/wildlife/planning/wildlifeguidelines/ and https://www.azqfd.com/Wildlife/LivingWith.

Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan (species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement vegetation.

The Department requests further coordination to provide project/species specific recommendations, please contact Project Evaluation Program directly at PEP@azgfd.gov.

Project Location and/or Species Recommendations:

HDMS records indicate that one or more native plants listed on the **Arizona Native Plant Law and Antiquities Act** have been documented within the vicinity of your project area. Please contact:

Arizona Department of Agriculture

1688 W Adams St. Phoenix, AZ 85007 Phone: 602.542.4373

https://agriculture.az.gov/sites/default/files/Native%20Plant%20Rules%20-%20AZ%20Dept%20of%20Ag.pdf starts on page 44

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HDMS records indicate that one or more **Listed, Proposed, or Candidate** species or **Critical Habitat** (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at https://www.fws.gov/office/arizona-ecological-services or:

Phoenix Main Office

9828 North 31st Avenue #C3 Phoenix, AZ 85051-2517 Phone: 602-242-0210 Fax: 602-242-2513 **Tucson Sub-Office**

201 N. Bonita Suite 141 Tucson, AZ 85745 Phone: 520-670-6144 Fax: 520-670-6155 Flagstaff Sub-Office

Fax: 928-556-2121

SW Forest Science Complex 2500 S. Pine Knoll Dr. Flagstaff, AZ 86001 Phone: 928-556-2157

This review has identified **riparian areas** within the vicinity of your project. During the planning stage of your project, avoid, minimize, or mitigate any potential impacts to riparian areas identified in this report. Riparian areas play an important role in maintaining the functional integrity of the landscape, primarily by acting as natural drainages that convey water through an area, thereby reducing flood events. In addition, riparian areas provide important movement corridors and habitat for fish and wildlife. Riparian areas are channels that contain water year-round or at least part of the year. Riparian areas also include those channels which are dry most of the year, but may contain or convey water following rain events. All types of riparian areas offer vital habitats, resources, and movement corridors for wildlife. The Pinal County Comprehensive Plan (i.e. policies 6.1.2.1 and 7.1.2.4), Open Space and Trails Master Plan, Drainage Ordinance, and Drainage Design Manual all identify riparian area considerations, guidance, and policies. Guidelines to avoid, minimize, or mitigate impacts to riparian habitat can be found

at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/. Based on the project type entered, further consultation with the Arizona Game and Fish Department and Pinal County may be warranted.

HDMS records indicate that **Sonoran Desert Tortoise** have been documented within the vicinity of your project area. Please review the Tortoise Handling Guidelines found at: https://www.azgfd.com/wildlife/nongamemanagement/tortoise/

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H. VIEWSHEDS

Much of the Property is highly visible from nearby areas due to the fact that it is bordered on two sides by existing development. The eastern side of the Horizons Subdivision is approximately 65' higher than the Property and has an unobstructed view into the project site. The southernmost homes of the Valley Vista subdivision also have visibility into the Property. Primary views away from the site are of the Catalina Mountains and Pusch Ridge to the east and southeast. See Exhibit II-H-1: Viewsheds and Exhibit II-H-2: Viewshed Photographs.

1. Viewshed Analysis

The subject property is within the Tangerine Road Corridor Overlay District but is exempt from some of the district's requirements because it is within the Rancho Vistoso PAD. Although the PAD is not exempted from the viewshed analysis required by TRCOD, this particular property does not front Tangerine Road and the southernmost proposed homes are over 1,300 feet from the Tangerine Road right-of-way, well beyond the District's "Target Area" so a viewshed analysis is not required. No significant scenic views of the Tortolita, Santa Catalina, or other mountains exist from Tangerine Road.

2. View Preservation Plan (VPP)

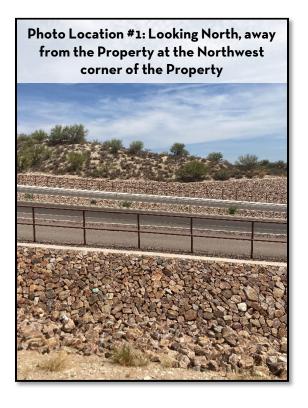
The Property does not front on Tangerine Road and the southernmost proposed homes are beyond the district's "Target Area", so a view preservation plan is not required.

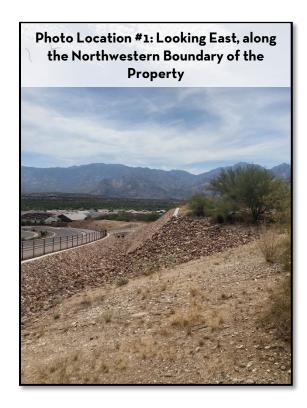
3. Core Character Vegetation (CCV)

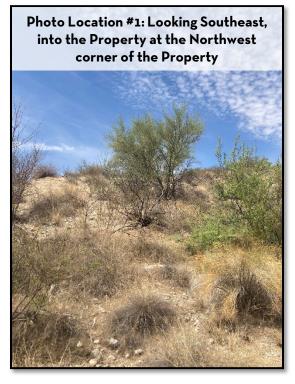
Not Applicable.



Exhibit II-H-2: Viewshed Photographs







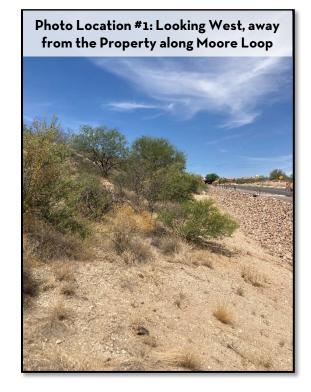
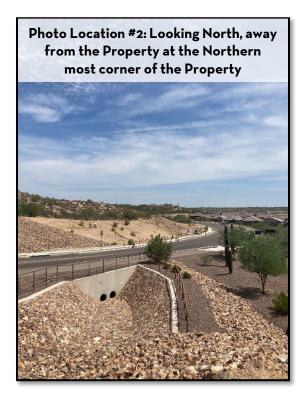
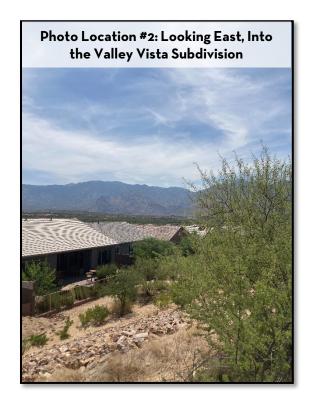
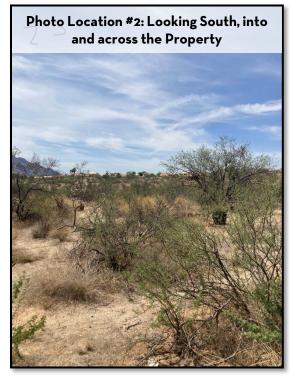


Exhibit II-H-2: Viewshed Photographs (cont'd)







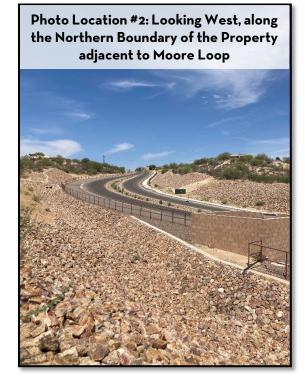
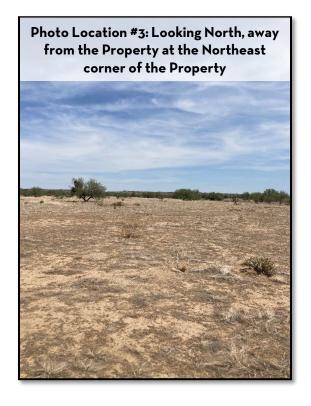
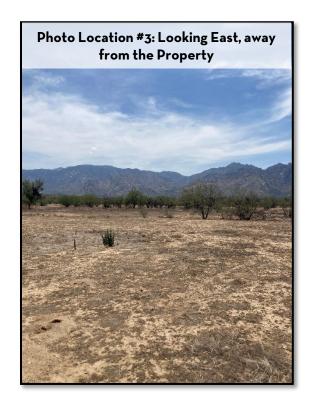
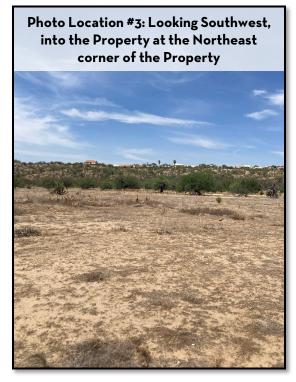


Exhibit II-H-2: Viewshed Photographs (cont'd)







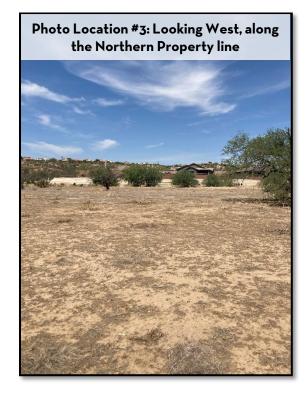
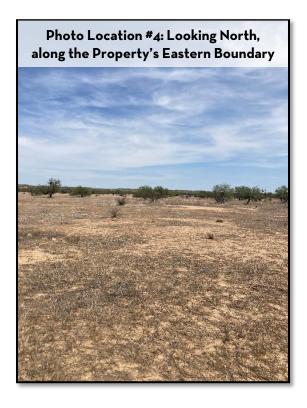
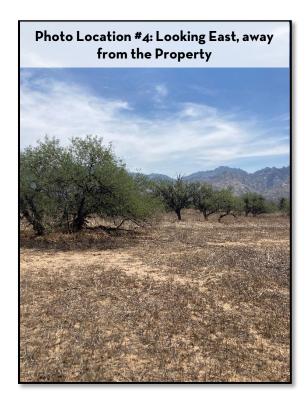
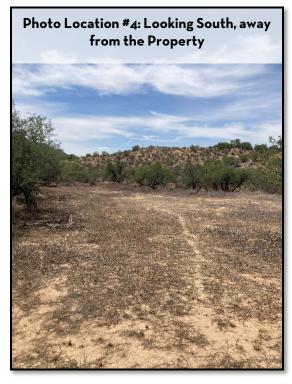


Exhibit II-H-2: Viewshed Photographs (cont'd)







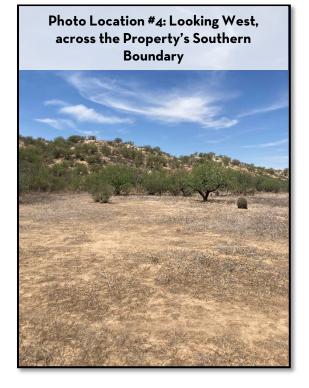
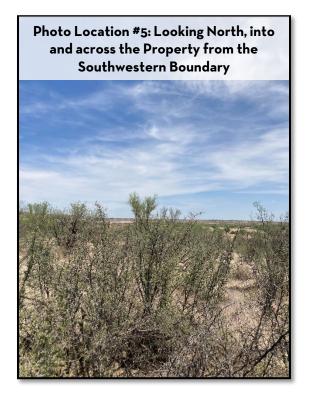
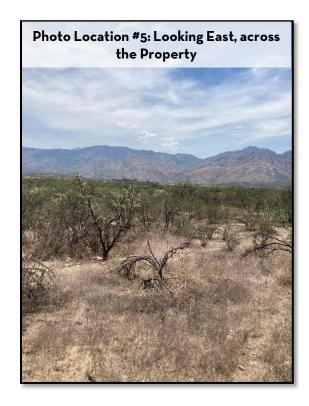
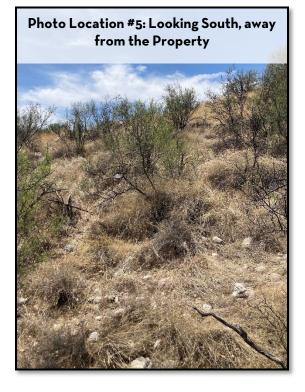


Exhibit II-H-2: Viewshed Photographs (cont'd)







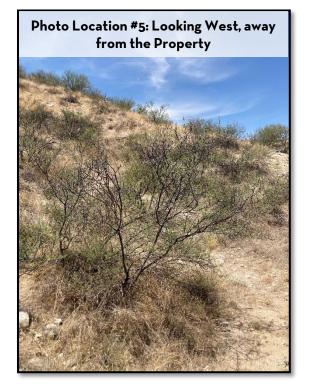
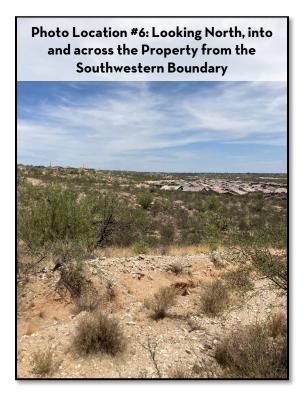
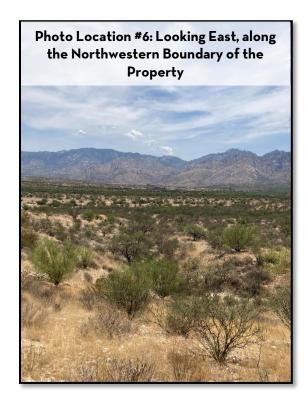
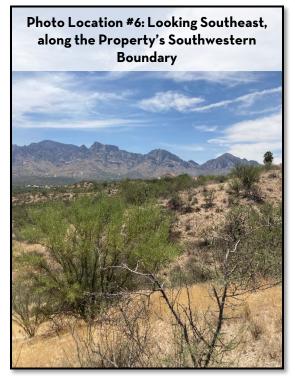
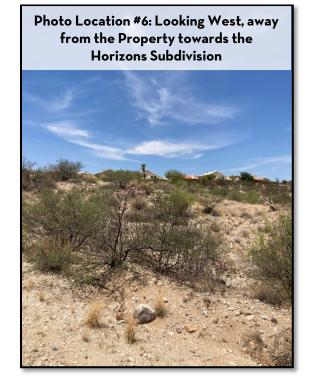


Exhibit II-H-2: Viewshed Photographs (cont'd)









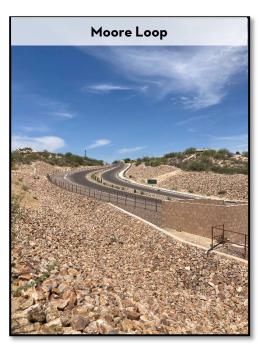
I. TRAFFIC

1. Existing / Proposed Offsite Streets between the Development and Nearest Arterial Streets

This development is located on the southern end of the newly constructed Moore Loop, approximately one-quarter mile east of the intersection of Rancho Vistoso Boulevard and Moore Loop. Moore Loop is two-lane roadway (one in each direction) with a five-foot concrete sidewalk and a tenfoot multi-use path that runs for its entirety. The entry into the site will come from Moore Loop at an existing curb cut, and a median break is proposed to provide a left-turn into the project.

2. Arterial Streets within One Mile of the Site

All the traffic generated by this project will be accommodated by Moore Loop, Rancho Vistoso Boulevard, Tangerine Road, First Avenue, Moore Road, and Naranja Drive. See Exhibit: II-I-1 Major Roads. An analysis of capacity (the "Vistoso Parcel 5R- Moore Loop Road South, East of Rancho Vistoso Blvd. Traffic Impact Analysis") by SWTE, dated November 2022 has been submitted as a standalone report.



- i. Existing and proposed right-of-way widths. See table below.
- ii. Whether or not said widths conform to Oro Valley minimum requirements. See table below.
- iii. Ownership (public or private). See table below.
- iv. Whether or not rights-of-way jog or are continuous. See table below.
- v. Number of travel lanes, theoretical capacity, and design speed for existing streets. See table below.
- vi. Present Average Daily Traffic (ADT) for existing streets. See table below.
- vii. Describe surface conditions on existing streets providing access to the site. See table below
- viii. Program for completion of roadway and intersection improvements. See table below.

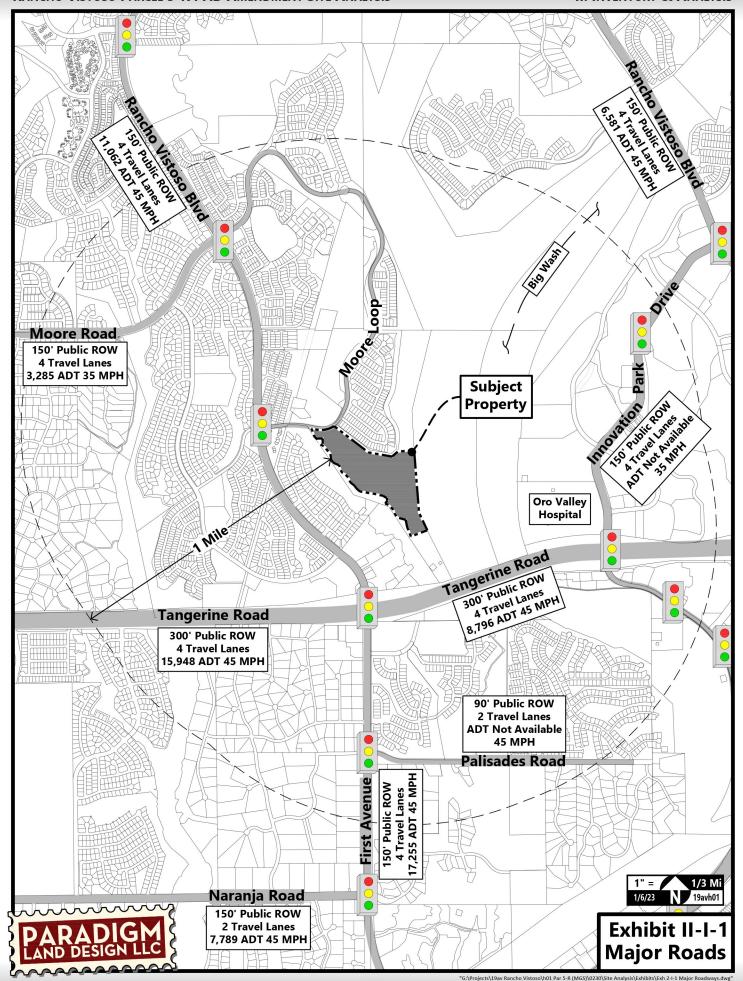
Roadway Name	Existing R.O.W.	Ultimate R.O.W.	Travel Lanes	Capacity	Speed Limit	ADT (PAG 2021)	Condition	Scheduled Improvements
Tangerine Road (Public)	300'	300' Continuous	4	40,000	45	15,948	Paved	Recently Completed
Rancho Vistoso Blvd. (Public)	150'	150' Continuous	4	40,000	45	11,062	Paved	None Scheduled
Moore Loop (Public)	150'	90' Jogged	2	25,000	35	Not Available	Paved	None Scheduled
First Avenue (Public	150'	150' Continuous	4	40,000	45	17,255	Paved	None Scheduled
Moore Road (Public)	150'	150' Jogged	4	25,000	35	1,067	Paved	None Scheduled

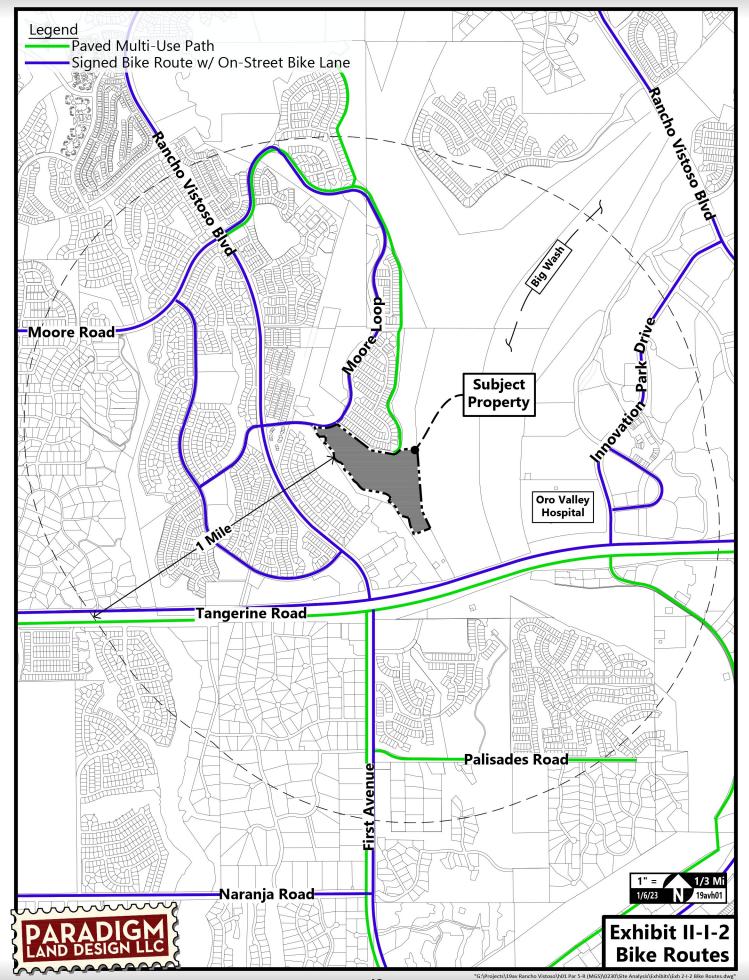
ix. Existing and proposed intersections on arterials within one mile of the site most likely to be used by traffic from the site.

Several arterial intersections that will carry traffic generated by this development exist within one mile of the Property. These include Tangerine Road & Rancho Vistoso Blvd. / First Avenue, Tangerine Road & Innovation Park Drive, Rancho Vistoso Blvd. & Moore Road, and Rancho Vistoso Blvd. & Moore Loop.

x. Existing bicycle and pedestrian ways adjacent to the site and their connections with arterial streets, parks, and schools.

There is a signed bike route with on-street multi-use lane that extends the entire length of Rancho Vistoso Boulevard. The newly constructed Moore Loop includes a ten-foot-wide multi-use path that extends for its entirety. On-street multi-use lanes and paved off-street multi-use paths also exist along Tangerine Road and south of Tangerine along First Avenue. These routes provide connectivity to Painted Sky Elementary School, Innovation Academy, Copper Creek Elementary School, Basis North Charter School, Canyon Del Oro High School, Honey Bee Park, the Woodshade Linear Park, Sunset Park, Hohokam Park, the Naraja Townsite Park, and to the greater Oro Valley / Pima County bicycle-pedestrian path system. See Exhibit II-I-2: Bike Routes.





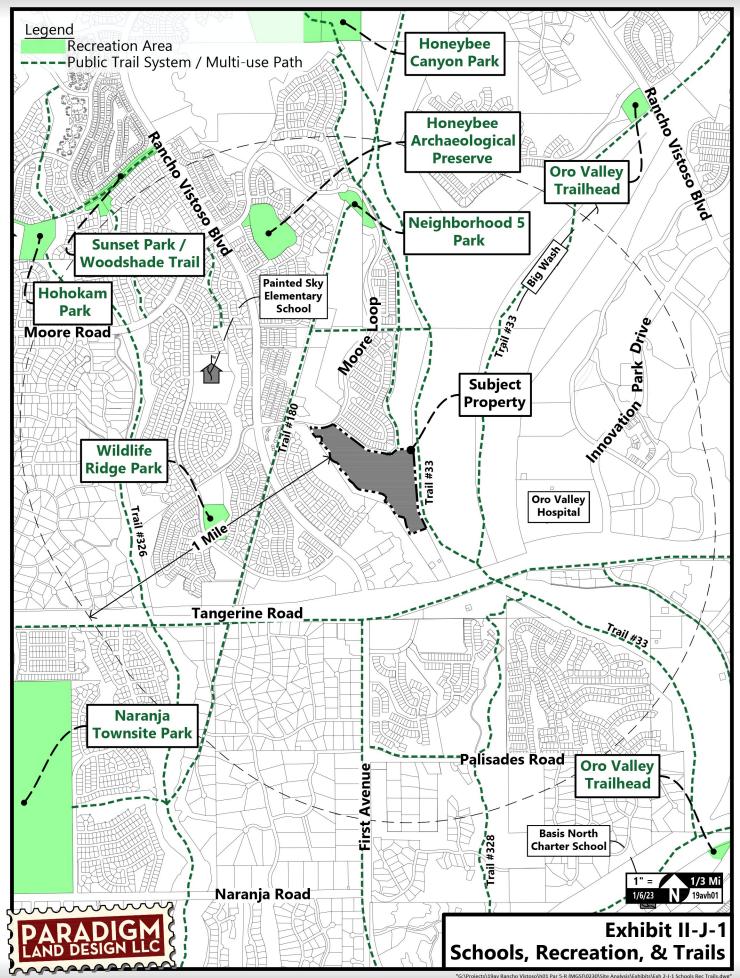
J. PARKS, RECREATION AREAS, AND TRAILS

There are numerous trails and neighborhood parks located within one mile of the Property. Wildlife Ridge Park is approximately one-half mile to the west. The Honeybee Archaeological Preserve and the Moore Loop Park are both three quarters of a mile north of the property. The Sunset Park / Woodshade Trail and Hohokam Park are a mile northwest of the site, and the Naranja Townsite park is just over one mile to the southwest. There are a series of natural trails and multi-use paths that weave their way through and around the surrounding neighborhoods of Rancho Vistoso. These trails connect neighborhoods to one another, to the active recreation areas, and to the greater Oro Valley trails system. See Exhibit II-J-1: Schools, Recreation & Trails.

Surrounding Recreation Areas

Park Name	Park Size (Acres)	Park Type (Active or Passive)
Wildlife Ridge Park	5.5±	Passive
Honeybee Archaeological Preserve	13.0±	Passive
Moore Loop Park	3.9±	Active & Passive
Naranja Townsite Park	172.6±	Active & Passive
Hohokam Park	8.8±	Active & Passive
Sunset Park / Woodshade Trail	3.1±	Active & Passive
Big Wash Open Space	>500	Passive





K. Schools

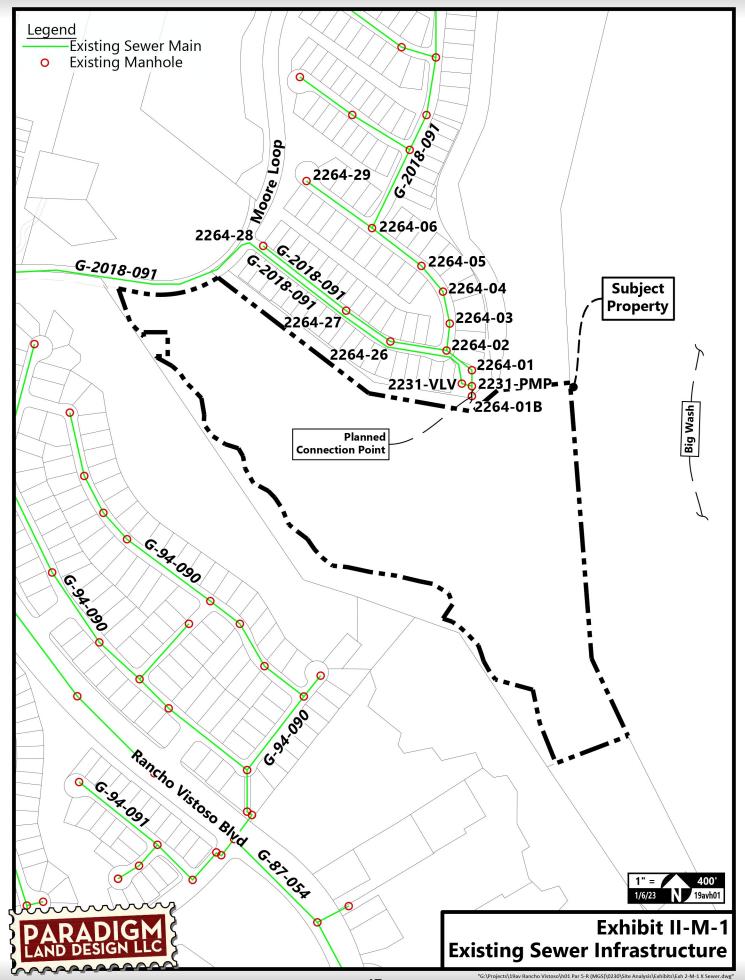
Students within this development may attend private schools, charter schools, or will be homeschooled. Alternatively, some parents may allow their children to attend government schools within the Amphitheater Unified School District. Innovation Academy is just over one mile to the northwest, and Basis North Charter School is approximately one and a quarter mile to the southeast. Painted Sky Elementary School is approximately one-half mile to the northwest of the property. Future students may also attend Coronado K-8, Ironwood Ridge High School, and Canyon Del Oro High School, which also have capacity for this development. See Exhibit II-J-1: Schools, Recreation &Trails.

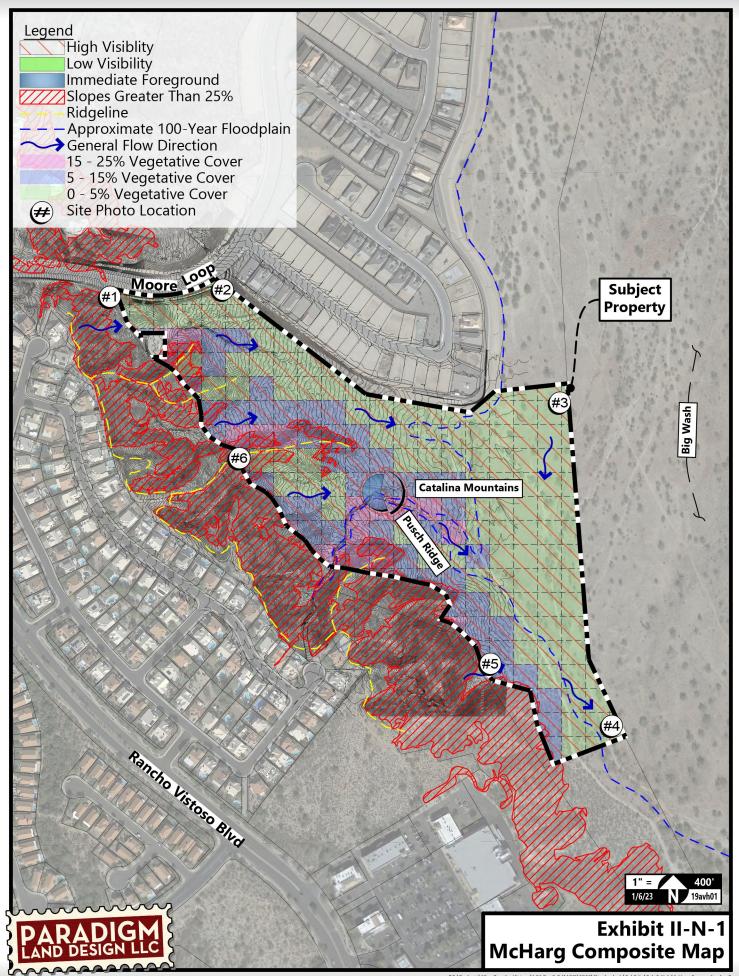
L. WATER SERVICE

The Property will be served by the Oro Valley Water Utility (OVWU). The exact nature of offsite improvements will be determined during the platting process, although none are anticipated. There is a 12" PVC water line that exists within the Moore Loop right-of-way that will supply this project with adequate water pressure. An OVWU facility exists along the Property's western boundary.

M. SEWER SERVICE

There is an existing 8" sewer stub (G-2018-091) extending toward the Property from the pump station located at the southeast corner of the Valley Vista subdivision located directly north of this project. The pump station and sewer stub were designed to accommodate the school that was previously expected to occupy this Property. Capacity is currently available for this project in the public sewer G-2018-091, downstream from manhole 2264.01B. See Exhibit II-M-1: Existing Sewer Infrastructure.





III. LAND USE PROPOSAL

This section describes how the development responds to the opportunities and constraints described in the Inventory & Analysis section of this document, along with the Town of Oro Valley Development Code. As evidenced by the Tentative Development Plan and the information below, this proposed rezoning has been crafted after careful and responsive consideration of the Property's context.

A. PROJECT OVERVIEW

1. Project Description

The property owner proposes to rezone the Property from Rancho Vistoso PAD CI Cultural / Institutional to MDR Medium Density Residential. This will allow for the development of a single-family residential neighborhood consisting of approximately 59 lots. This project will be of a similar density to the surrounding developments, 1.6 DU/AC, and will provide an appropriate transition between the existing developments to the north and west, and the open space areas to the south and east. The regulated 25% slopes along the western boundary of the project will be preserved to the greatest extent possible, and the project will feature a generous amount of onsite open space. The proposed residences within the project will be a mix of one and two-story homes. The residences will have a maximum height of 30' and will range in square footage. See Exhibit III-A-1: Tentative Development Plan

2. General Plan Conformance

The property has a current land use designation of School. The approximately 28-acre portion of this Property proposed for residential development will require a General Plan amendment from School to Medium Density Residential (MDR) to allow for the construction of the project as proposed. The approximately 8-acre portion of the Property designated as an ESLO Major Wildlife Linkage will be amended to from School to Open Space.

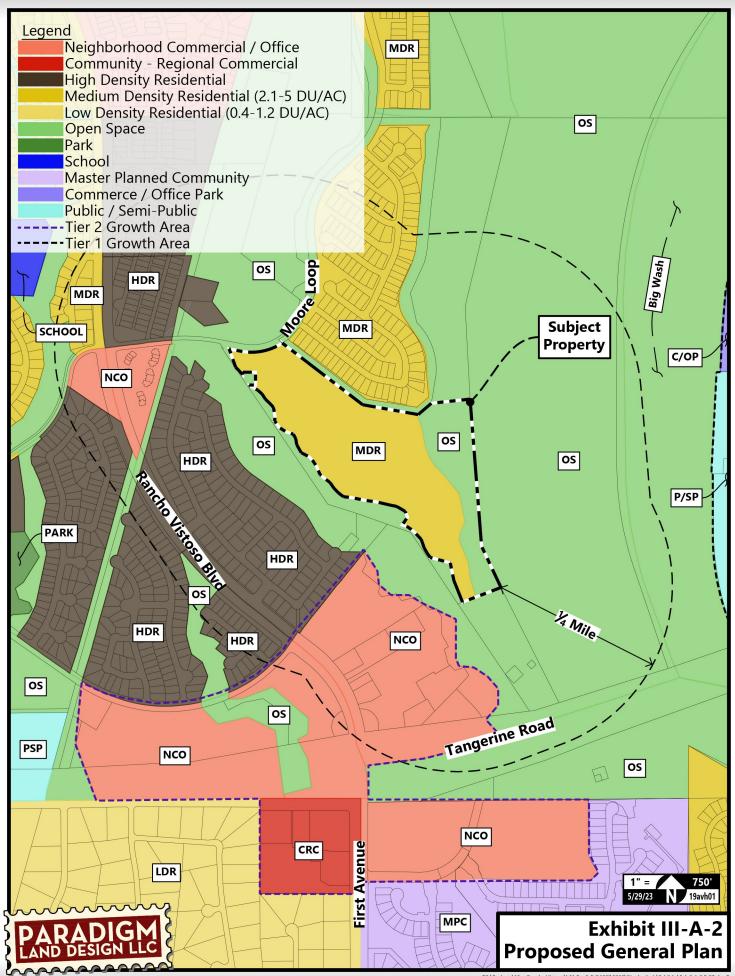
3. Flexible Design Options / Conservation Subdivision Design

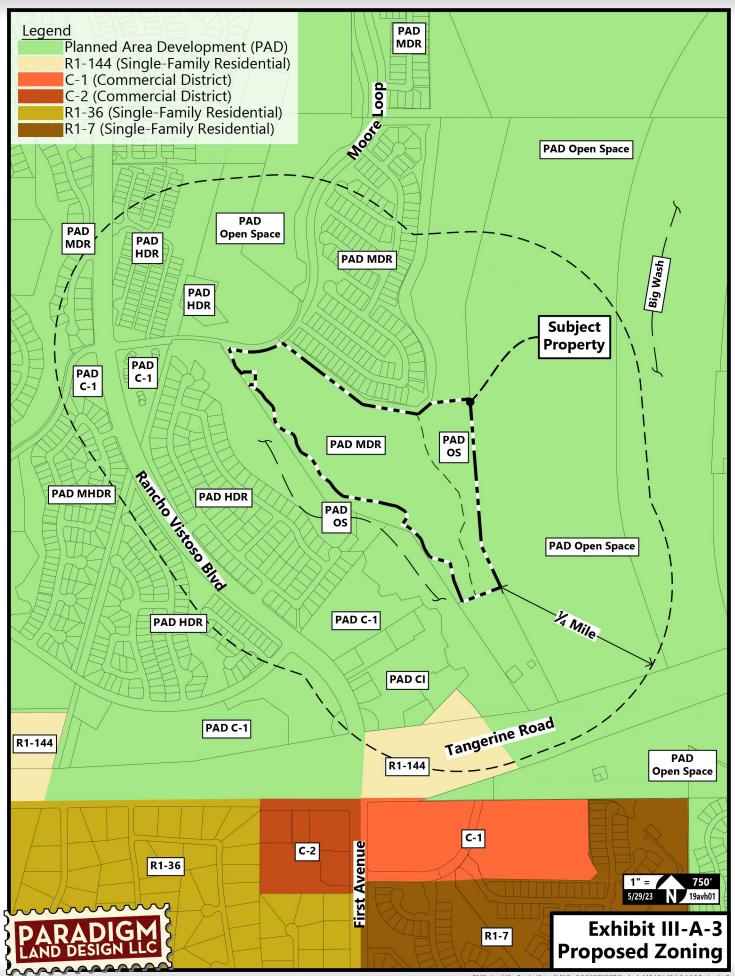
This development will not rely on Flexible Development Provisions or Conservation Subdivision Design. The Rancho Vistoso PAD is a giant clustered Master Plan, having preserved roughly half of its several thousand acres as open space in perpetuity.

RANCHO VISTOSO PARCEL 5-R PAD AMENDMENT SITE ANALYSIS

III. LAND USE PROPOSAL







B. EFFECT ON EXISTING LAND USES

Since the subject property is currently vacant, there will be no negative impact on existing land uses. By developing this property as a residential development, it will create a compatible development with the existing homes to the north and west. Although less than the MHDR land use originally planned for this Property the proposed density of this project will help support the many commercial businesses within the greater Oro Valley area.

C. ENVIRONMENTALLY SENSITIVE LANDS

ESL does not apply to this parcel because over 25% of Rancho Vistoso has been developed with infrastructure or finished building pads. Any vegetation that is disturbed will meet mitigation requirements as set forth in the Town of Oro Valley Zoning Code.

D. TOPOGRAPHY

1. Design Responses to Site Topography

The hillside forming the Property's southwestern edge will largely be preserved, while the flatter portions of the Property are proposed for development. Lot elevations will generally be set at or near existing grades except where greater deviation is needed to address drainage, cut/fill balance, or other design constraints. Areas of the site to be developed will be mass graded just as surrounding subdivisions were at the times of their development.

2. Slope Encroachment

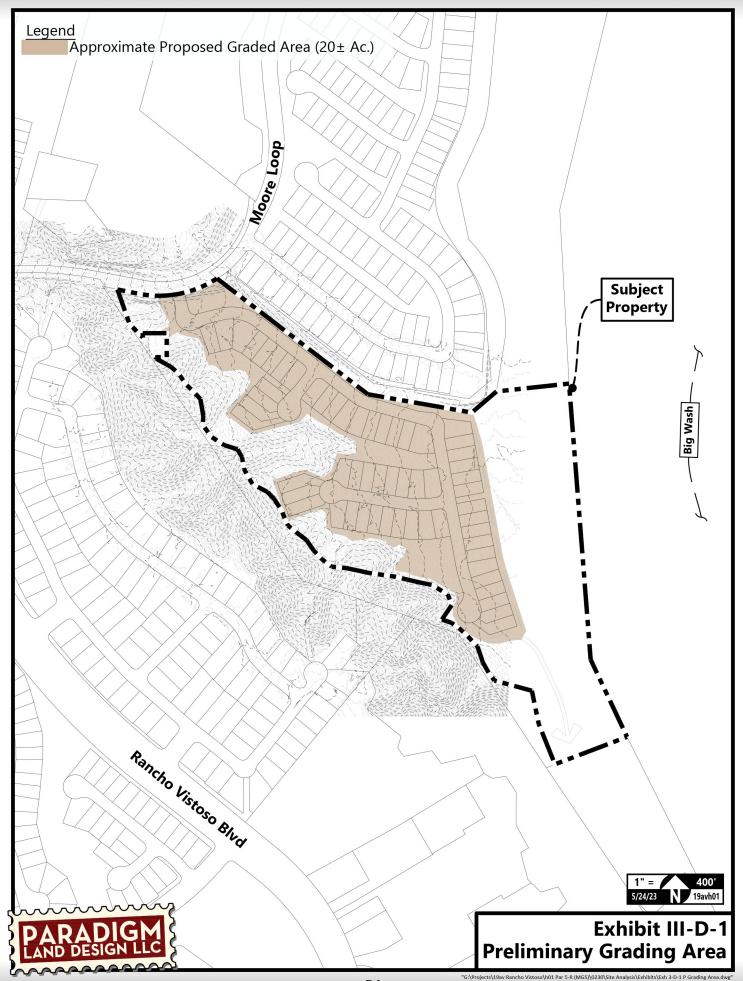
The site contains regulated 25% slopes within the hillsides forming the southwestern boundary, which will be preserved except where necessary for installation of infrastructure. Encroachment into these slopes is expected to be minimal, as most of the proposed development will occur in the northeastern portion of the site.

3. Hillside Conservation Areas

Not applicable.

4. Quantified Site Disturbance

Approximately 20± acres of the site will be graded to allow for the construction of this development. Disturbed areas not proposed for construction of homes and infrastructure will be revegetated with native vegetation and/or hydroseeding. The remaining 13.6± acres will be left in its natural condition.



E. CULTURAL / ARCHAEOLOGICAL / HISTORIC RESOURCES

1. Resource Protection

If any cultural resources are discovered during construction, State and local rules will be followed regarding the handling and treatment of such cultural resources.

2. Treatment Plan

The subject property was originally surveyed in 1986 by the Institute for American Research (IAR), as part of the "Rancho Vistoso Survey". Within the subject property, IAR archaeologists did not identify any archaeological sites, but because this survey is over 30 years old the data may no longer be accurate. A more recent survey was conducted by SWCA in 2007, that covered the entire project area when the construction of a new school was proposed. This survey located one archaeological site, designated AZ BB:9:417 (ASM) and one isolated occurrence. Because this survey was done more than ten years ago, the site was resurveyed by SWCA for a second time in July 2022. This current survey was unable to locate the previously identified archaeological site as it is most likely within the newly constructed Moor Loop right-of-way. No archaeological resources were identified within the subject property during this resurvey. In the unlikely event that buried archaeological features or human remains are unearthed during construction, all work should stop in the immediate vicinity of the discovery and an archaeologist should be contacted to verify the discovery and assess its significance.

F. POST-DEVELOPMENT HYDROLOGY

1. Design response to Site Hydrology

This project will incorporate appropriate mitigation measures in accordance with the Town of Oro Valley Floodplain Management Code and the Drainage Criteria Manual. The upstream flows will be directed through the project site via drainage improvements to convey both the existing offsite flows and the onsite generated runoff to Big Wash. An extension of the existing soil cement bank protection is proposed along the west bank of Big Wash adjacent to the project site, which will provide flood protection for the easternmost lots.

The project is directly adjacent to a regional public wash (Big Wash) and the outflow introduced by the development can be demonstrated to not affect the peak flow rate within Big Wash. Typical detention requirements may be waived as the entire project site discharges directly to Big Wash. See Exhibit III-F-1: Post-Development Hydrology.

2. Modification of Drainage Patterns

The upstream generated flows will reach the proposed project site within their respective watersheds. The surface runoff will be captured within onsite drainage improvements and conveyed through the site to the east, discharging to Big Wash. In order to prevent increases to pre-development flow volumes and velocities, additional stormwater runoff created by the proposed impervious surfaces will be collected in flow storage basins throughout the site. The proposed design flows will then be metered to post development flows which will not result in impacts to downstream properties. Moreover, at least a 10% reduction of the onsite peak flows is expected after the flow attenuation unless the Town Engineer grants a detention waiver due to the Property's adjacency to Big Wash.

Erosion protection will be installed along the east edge of the proposed site improvements where necessary to mitigate the erosion hazard area associated with the wash. The Final Site Plan package and Drainage Report will include a recommended design cross-section for the erosion protection, which is expected to be mostly subsurface. This project will result in modification of the regulatory floodplain limits. A Floodplain Use Permit will be required.

An existing drainageway coming down from the Horizons subdivision into the Property has sustained damage and needs to be repaired. Bogardus Engineering has been retained by the Vistoso Community Association (VCA) to prepare a design for repair and strengthening of the drainageway's design to reduce future maintenance needs and potential damage. Their proposed improvements would extend into the Property, so they have requested an easement. This project will provide the requested easement during the platting phase.



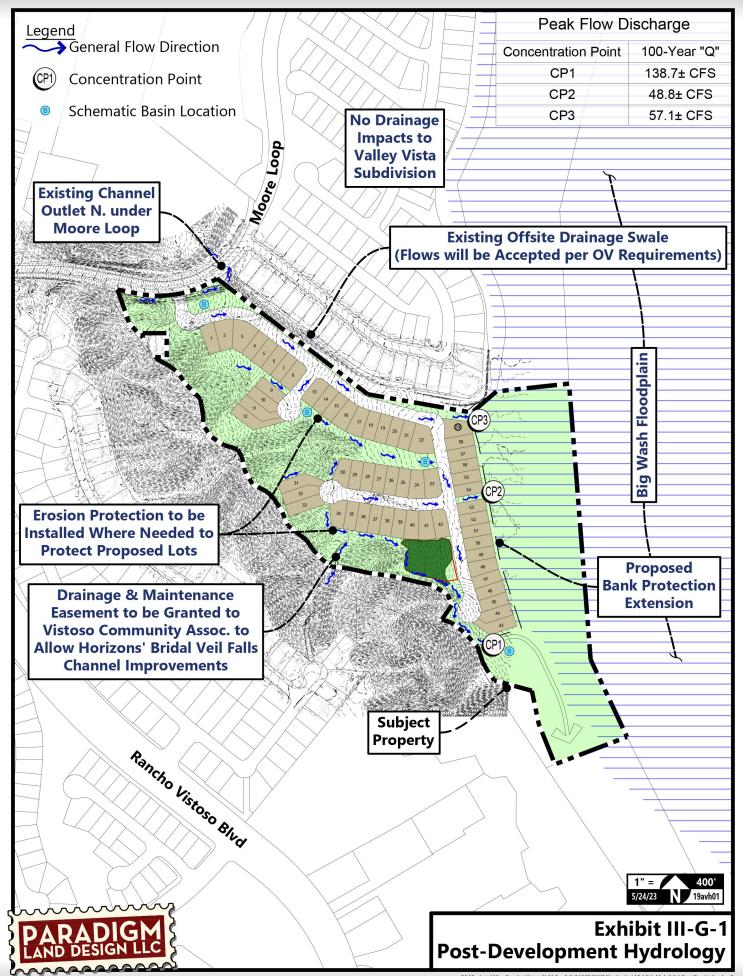
3. Mitigation

Drainage improvements and roadway construction within the proposed development will capture and convey offsite and onsite surface flows through the subdivision via storm pipes/storm drain networks and drainage channels. The drainage design will be based on the Town Floodplain Management Code and Drainage Criteria Manual. Channel geometry will follow accepted engineering standards regarding erosion and flow velocity constraints. Finished floor elevations will be set at a minimum, one foot above the adjacent flow depths within channels, roadways or 100-year floodplains.

Soil cement bank protection along the west bank of Big Wash will be incorporated into the grading/drainage plan. The bank protection will modify the FEMA Zona A associated with Big Wash along the west bank and will protect the residential lots at the east edge of the subdivision. A Conditional Letter of Map Revision (CLOMR) will be obtained from FEMA prior to construction and the subsequent LOMR will be obtained from FEMA after construction to remove the protected portions of the project site from a FEMA Special Flood Hazard Area.

4. Town Policy

Drainage improvements will be designed to satisfy the Town Floodplain Management Code and Drainage Criteria Manual. Detention requirements may be waived due to the proximity of Big Wash along the east portion of the project site. Outflows associated with the project site will not affect the peak flows within the Big Wash floodplain.



G. VEGETATION

Existing native vegetation will be inventoried, and viable specimens will be transplanted or mitigated per the Town's native plant preservation ordinance. No threatened or endangered flora are known to exist onsite. 35 healthy individual plants meet Oro Valley's definition of "significant" and are shown on the SRI. These include 7 Foothill Palo Verde trees, 27 Velvet Mesquite trees, and 1 Whitethorn Acacia tree. Mitigation for disturbance of these trees will include installation of 70 new trees and 350 understory plants. See Appendix 'A': Site Resource Inventory. Native plants will be reintroduced throughout the development and open space areas in accordance with the Town's landscape design guidelines. Natural open space is provided along the western boundary containing hillside slopes, and along the eastern boundary within the pre-ESLO mapped riparian area that is identical to the ESLO Major Wildlife Linkage area. Revegetated open space will be located throughout the development, mainly in the recreation area and in the drainage-related open spaces. Landscaping will be installed throughout the open spaces and around the perimeter of the property to meet Oro Valley's perimeter landscape bufferyard standards. All installed landscaping will be drought tolerant per Oro Valley's guidelines. Native plants are drought tolerant and uniquely suited for the local climate, and further meet the primary objective of development a sustainable and environmentally sensitive residential community.

H. WILDLIFE

Being directly adjacent to the Big Wash, the Property's eastern boundary runs along a significant wildlife corridor. This corridor allows for continued wildlife movement throughout the greater Town of Oro Valley. The approximately 8-acre portion of the Property designated as an ESLO Major Wildlife Linkage will be rezoned and preserved as open space.

I. VIEWSHEDS

1. Design Response to Site Viewsheds

This proposed residential development will consist of single-story and two-story homes and will abide by the PAD MDR's maximum building height of 30 feet. Because of where the project is located, impacts to viewsheds of neighboring developments will be minimal. Bufferyards will be provided around the portions of the perimeter of the property to help mitigate views into the site from the Valley Vista subdivision and Moore Loop.

At our initial neighborhood meeting several residents expressed concern about potential viewshed impacts from the Valley Vista subdivision, and we heard a suggestion to adjust the site plan to locate the proposed road rather than the rear yards of proposed homes along the Property's northern boundary. We met with individual neighbors to analyze potential view impacts from their homes. The revised site plan was shown to reduce potential viewshed impact and privacy concerns. Additionally, we will be installing a screen wall along the proposed roadway to further reduce potential visual impacts.

At our second neighborhood meeting a couple residents expressed concern about two home sites proposed at the north end of the Property that could potentially create privacy issues. We have revised the site plan to relocate those proposed homes to other parts of the Property that do not have the potential to create privacy concerns.

2. ORSCOD / TRCOD Conformance

The subject property is within the Tangerine Road Corridor Overlay District but is exempt from some of the district's requirements because it is within the Rancho Vistoso PAD. Although the PAD is not exempted from the viewshed analysis required by TRCOD, this particular property does not front Tangerine Road and the southernmost proposed homes are over 1,300 feet from the Tangerine Road right-of-way, well beyond the District's "Target Area" so a viewshed analysis is not required. No significant scenic views of the Tortolita, Santa Catalina, or other mountains exist from Tangerine Road. The architectural design of these homes will be consistent with surrounding residential developments. They will be constructed out of materials such as stucco, adobe, and wood frame, and will have either a gabled,

tiled, or flat roof. All structures will be painted in desert neutral colors to help blend this development into the desert environment.

J. TRAFFIC

1. Traffic Impact Analysis

i. Proposed Internal Circulation and Access to/from Arterial Streets

The entry to the community will be located at an existing curb cut on Moore Loop. A left turn lane will be constructed on Moore Loop to provide access to the project from the north. New roadways within the development will be constructed to Town of Oro Valley standards and will be public.

ii. Offsite Road Improvements

In addition to the left-turn lane that will need to be constructed on Moore Loop, the proposed access into the site will require the reconstruction of the existing drainage channel, rock slope, fencing, asphalt pathway, and curb along the southern edge of Moore Loop. The roadways adjacent to and within one mile of the subject property are in good condition and will not require any additional improvements.

iii. Projected ADT for Internal Circulation System at Build Out & Level of Service to all Streets

The 59 single-family homes proposed will generate approximately 627 Average Daily Trips (ADT) impacting the nearby public roadway system. The roadways inside this development and the abutting Moore Loop, which is operating below capacity, will be able to accommodate traffic generated from this project.

iv. Impact to Existing Development Abutting Off-site Streets

Rezoning the subject property from CI (Cultural / Institutional) to MDR (Medium Density Residential) will reduce the weekday traffic impacts to surrounding developments and off-site streets, compared to a scenario in which the property was to be developed into a middle school as previously planned. According to the Traffic Impact Analysis submitted with this application, a middle-school would've generated approximately 1,680 ADT versus the 627 ADT anticipated from this project.

v. Capacity Analyses for Proposed Internal & Off-site Streets.

Rancho Vistoso Boulevard

Rancho Vistoso Boulevard is a four-lane (two in each direction) paved arterial road with a divided landscaped median and left turn lanes, with a posted speed limit of 45 mph. The existing and ultimate right-of-way is 150 feet, which is continuous. According to the Pima Association of Governments (PAG) 2020 Traffic Volumes, the average daily trip volume (ADT) for this arterial roadway is 11,062 ADT.

Tangerine Road

Tangerine Road is a four-lane (two in each direction) paved arterial road with a divided landscaped median and left turn lanes, with a posted speed limit of 45 mph. The existing and ultimate right-of-way is 300 feet, which jogs. According to the Pima Association of Governments (PAG) 2020 Traffic Volumes, the average daily trip volume (ADT) for this arterial roadway ranges from 8,796 to 15,948 ADT.

First Avenue

First Avenue is a four-lane (two in each direction) paved arterial road with a divided landscaped median and left turn lanes, with a posted speed limit of 45 mph. The existing and ultimate right-of-way is 150 feet, which is continuous. According to the Pima Association of Governments (PAG) 2020 Traffic Volumes, the average daily trip volume (ADT) for this arterial roadway is 17,255 ADT.

Moore Road

Moore Road is a two-lane (one lane in each direction) paved collector road with a striped shoulder and a posted speed limit of 45 mph. The existing and ultimate right-of-way varies between 80 and 150 feet. According to the Pima Association of Governments (PAG) 2021 Traffic Volumes, the average daily trip volume (ADT) for this collector roadway is 3,285 ADT

Moore Loop

Moore Loop is a two-lane (one lane in each direction) paved collector road with a striped shoulder and a posted speed limit of 35 mph. The existing and ultimate right-of-way varies between 60 and 90 feet. According to the Pima Association of Governments (PAG) Traffic Volumes, the average daily trip (ADT) for this collector roadway has not been calculated yet.

vi. Improvements Required for Those Streets Described in Sub-paragraph v. Above

Rancho Vistoso Blvd, Tangerine Road, First Avenue, and Moore Road are all in good condition and will not require any improvements to accommodate this development. Moore Loop will require modifications to the raised median, multi-use path, and existing drainage channel along the project frontage. These modifications will include a left turn lane from westbound Moore Loop, which will also provide full turning movements for vehicles exiting the Property.

vii. Party / Agency to be Responsible for Making Necessary Improvements

The project developer will be responsible for making any necessary offsite roadway improvements.

viii. Evidence that Proposed Turning Movements Will Meet Safety Standards in Relationship to Traffic Volumes

The only ingress/egress point into this project will come from the constructed curb cut on Moore Loop. A median break and left-turn lane will need to be constructed in the raised median of Moore Loop to allow access into the property from the westbound Moore Loop. This median break will allow full traffic movements for vehicles exiting the property. Vegetation adjacent to the project's ingress/egress point will be maintained to provide safe site visibility for vehicles entering and exiting the site and will allow safe turning movements to and from the site. The proposed internal roadways will meet the Town of Oro Valley Minimum Design Standards.

2. Proposed Rights-of-Way

The internal neighborhood streets have been designed to create safe traffic movements. These new roadways will be public and will be constructed to Oro Valley's Subdivision Street Standards.

3. Proposed Pedestrian / Bicycle Circulation

This development will make pedestrian and bicycle connections to Moore Loop, which contains striped multi-use lanes, a sidewalk, and a paved multi-use path. Rancho Vistoso Blvd and Tangerine Road have existing striped multi-use lanes, sidewalks, and multi-use pathways that stretch for their entirety. Sidewalks will be constructed along all newly planned roadways within this development.

K. RECREATION & TRAILS

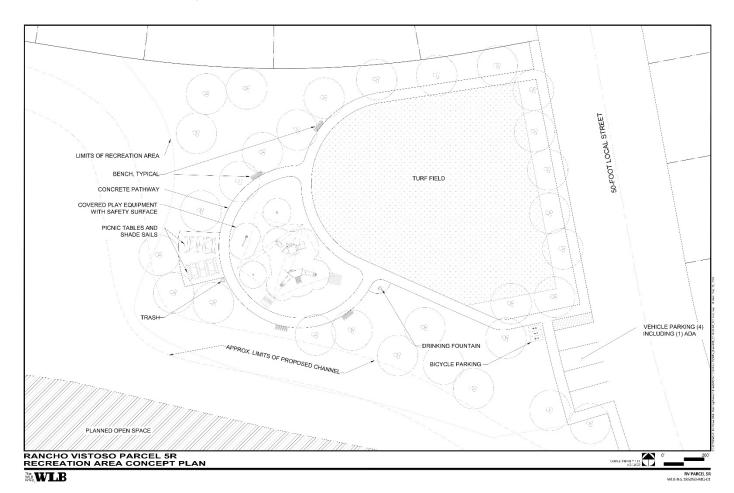
1. Off-site Trail Access

This project will provide pedestrian connections to the existing trail system within and along Big Wash and to the multi-use path along Moore Loop. These trails and pathways connect to the greater Oro Valley trail system.

2. Open Space Ownership

The proposed recreation area and other open spaces of the development will be owned and maintained by the HOA. The main recreation area for this site will be conveniently located for its residents and will include a variety of amenities. A conceptual recreation area plan is shown below.





L. Schools

1. Student Generation

This proposed development is expected to generate approximately 12 elementary students, 13 middle school students, and 6 high school students (using the accepted standard student multiplier of 0.2075 elementary students, 0.2197 middle school students, and 0.1282 high school students per single-family household).

2. School Capacity

According to the letter supplied by the Amphitheater School District, there is available capacity for this proposed development. See Exhibit III-L-1: School District Letter. A number of students from this neighborhood will undoubtedly attend the area's quasi-governmental charter schools and non-governmental private schools. Other children will attend Painted Sky Elementary, Coronado K-8 Middle School, and Ironwood Ridge High School, all of which have capacity to support this development. Oro Valley also has a thriving homeschool community, which further reduces the number of students expected to attend nearby government schools.

Exhibit III-L-1: School District Letter



LEGAL DEPARTMENT

Michelle H. Tong, J.D. Associate to the Superintendent General Counsel

(520) 696-5156 • FAX (520) 696-5074

701 W. Wetmore Road • Tucson, AZ 85705 • (520) 696-5000 • www.amphi.com

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SUPERINTENDENT Todd A. Jaeger, J.D.

June 20, 2022

Delivered via electronic mail

Clay Goodwin Paradigm Land Design, LLC Rancho Vistoso Blvd. and Moore Loop claygoodwin816@outlook.com

> RE: Rancho Vistoso Parcel numbers 219-20-914B & 219-54-006D

Dear Mr. Goodwin:

I am responding to your request for information regarding the capacity of Amphitheater schools impacted by your proposed development.

Using 2000 demographic multipliers developed by the U.S. Department of Census, Bureau of Census, and adjusted for Amphitheater District's school organizational patterns, we project the following student populations to result from this project when built:

Academic Level	56 Single family Units
Elementary	12
Middle	12
High School	7

The census multipliers we use to obtain these projections are 0.2075 single-family elementary students per household, 0.2197 single-family middle school students per household, and 0.1282 single-family high school students per household.

Amphitheater High School • Canyon del Oro High School • Ironwood Ridge High School Amphitheater Middle School • Coronado K-8 School • Cross Middle School • La Cima Middle School • Wilson K-8 School
Copper Creek Elementary • Donaldson Elementary • Harelson Elementary • Holaway Elementary • Innovation Academy • Keeling Elementary
Mesa Verde Elementary • Nash Elementary • Painted Sky Elementary • Prince Elementary • Rio Vista Elementary • Walker Elementary • Rillito Center • Amphi Academy Online

Amphitheater Unified School District does not discriminate on the basis of race, color, religion/religious beliefs, gender, sex, age, national origin, sexual orientation, creed, citizenship status, marital status, political beliefs/affiliation, disability, home language, family, social or cultural background in its programs or activities and provides equal access to the Boy Scouts and other designated yould groups. Inquiries regarding the District's non-discrimination policies are handled at 701 W. Wetmore Road, Tucson, Arizona 85705 by Frances Araujo Lopez, Equity & Safety Compliance Officer and Title IX Coordinator, (520) 696-5164, faraujolopez@amphi.com, or Kristin McGraw, Executive Director of Student Services, (520) 696-5230, kmcgraw@amphi.com.

Exhibit III-L-1: School District Letter (cont'd.)

Page 2

The schools that would be impacted by this population are listed below, along with the physical capacity available at each school *presently*. Please note that these schools will also be impacted by other developments in this area which may have already been approved by the Council but which are not yet built.

School Name	School Capacity	Spaces Currently Available
Painted Sky Elementary	778	450
Coronado K-8 Middle	456	89
Ironwood Ridge High	2286	679

If I can provide any additional information, please feel free to contact me.

Sincerely,

Kristin Magdziasz

Administrative Assistant to the Legal Department

Kristin Magoziasz

M. WATER

1. Water Demand

A good estimate for domestic water usage is 100 gallons per day per capita dry weather flow. According to the US Census Oro Valley has approximately 2.26 persons per household, which equates to daily water usage of roughly 226 gallons per household. With approximately 59 single-family residences being proposed in this development, the total domestic water use is projected at roughly 13,334 gallons per day.

On September 15, 2022, we submitted a public records request to Amphi School District, asking for typical water usage data for elementary, middle, and high schools. On March 16, 2023, we received a response including the following summary data:

School	Avg. Monthly Water Usage
Painted Sky Elementary School	419,731 Gal.
Cross Middle School	121,400 Gal.
Ironwood Ridge High School	3,109,653 Gal.

This property was previously planned by Amphi School District to be a middle school, so it is reasonable to expect that it would've used approximately the same amount of water as Cross Middle School. In other words, as a middle school this property would use roughly ten times as much water as the proposed single-family neighborhood.

2. Water Service Provider & Capacity

Oro Valley Water has the capacity and infrastructure available to serve this project. This project will connect to the existing water main line within the Moore Loop right-of-way. Additionally, this project will provide easements as requested by OVWU to access their existing facilities along the western edge of the Property and also to the south of the Property.

N. SEWER

1. Sewer Service Method

Pima County Regional Wastewater Reclamation Department will provide sewer service to this development. There is an existing 8" sewer stub (G-2018-091) extending toward the Property from the pump station located at the southeast corner of the Valley Vista subdivision located directly north of this project. The pump station and sewer stub were designed to accommodate the school that was previously expected to occupy this Property. Capacity is currently available for this project in the public sewer G-2018-091, downstream from manhole 2264.01B. See Exhibit III-N-1: Sewer Capacity Letter.

Exhibit III-N-1: Sewer Capacity Letter



JACKSON JENKINS DIRECTOR PH: (520) 724-6500 FAX: (520) 724-9635

June 22, 2022

Paul Oland Paradigm Land Design, LLC 7090 N Oracle Road Tucson, AZ 85704

Sewerage Capacity Investigation No. P22WC00193 Type I

RE: Rancho Vistoso Neighborhood 5 Parcel R, Parcels 21920914B, 21954006D Estimated Flow 12,096 gpd (ADWF)

Greetings:

The above referenced project is tributary to the Tres Rios Water Reclamation Facility via the Canada Del Oro Interceptor.

Capacity is currently available for a project this size in the public sewer G-2018-091, downstream from manhole 2264-01B.

This letter is not a reservation or commitment of treatment or conveyance capacity for this project. It is not an approval of point and method of connection. It is an analysis of the system as of this date. Allocation of capacity is made by the Type III Capacity Response.

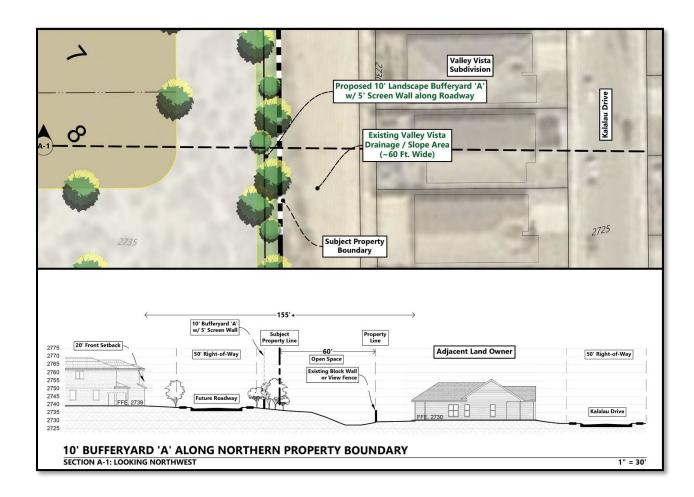
If you need further information, please feel free to contact me at (520) 724-6488.

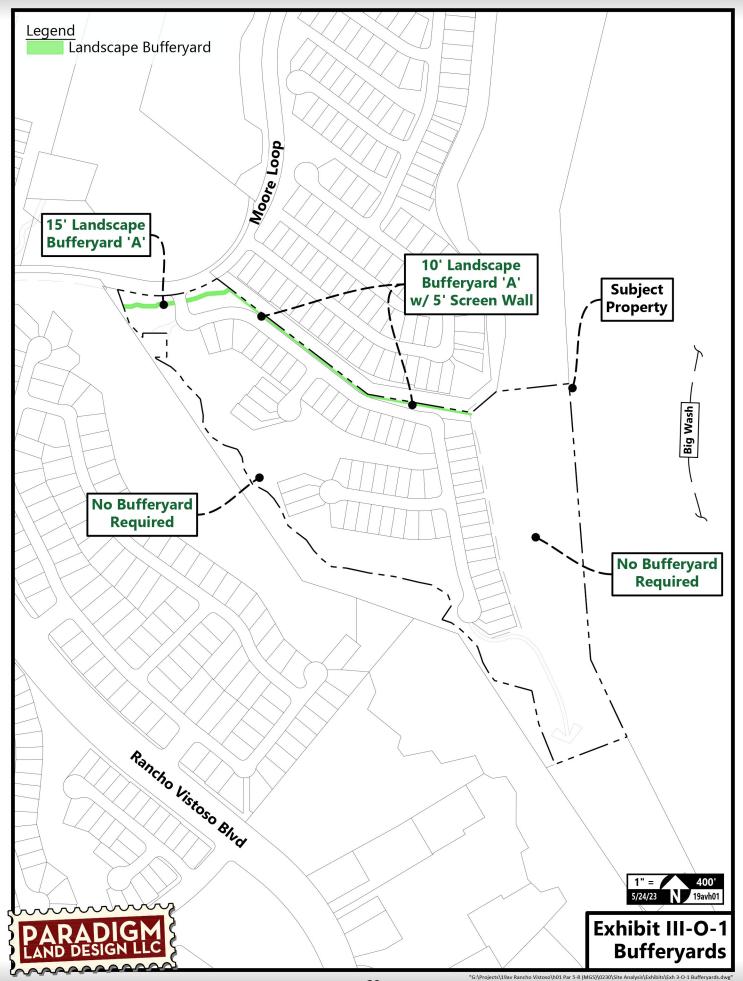
Reviewed by: Mirela Hromatka, Planner Sr.

O. BUFFERYARDS

1. Mitigation

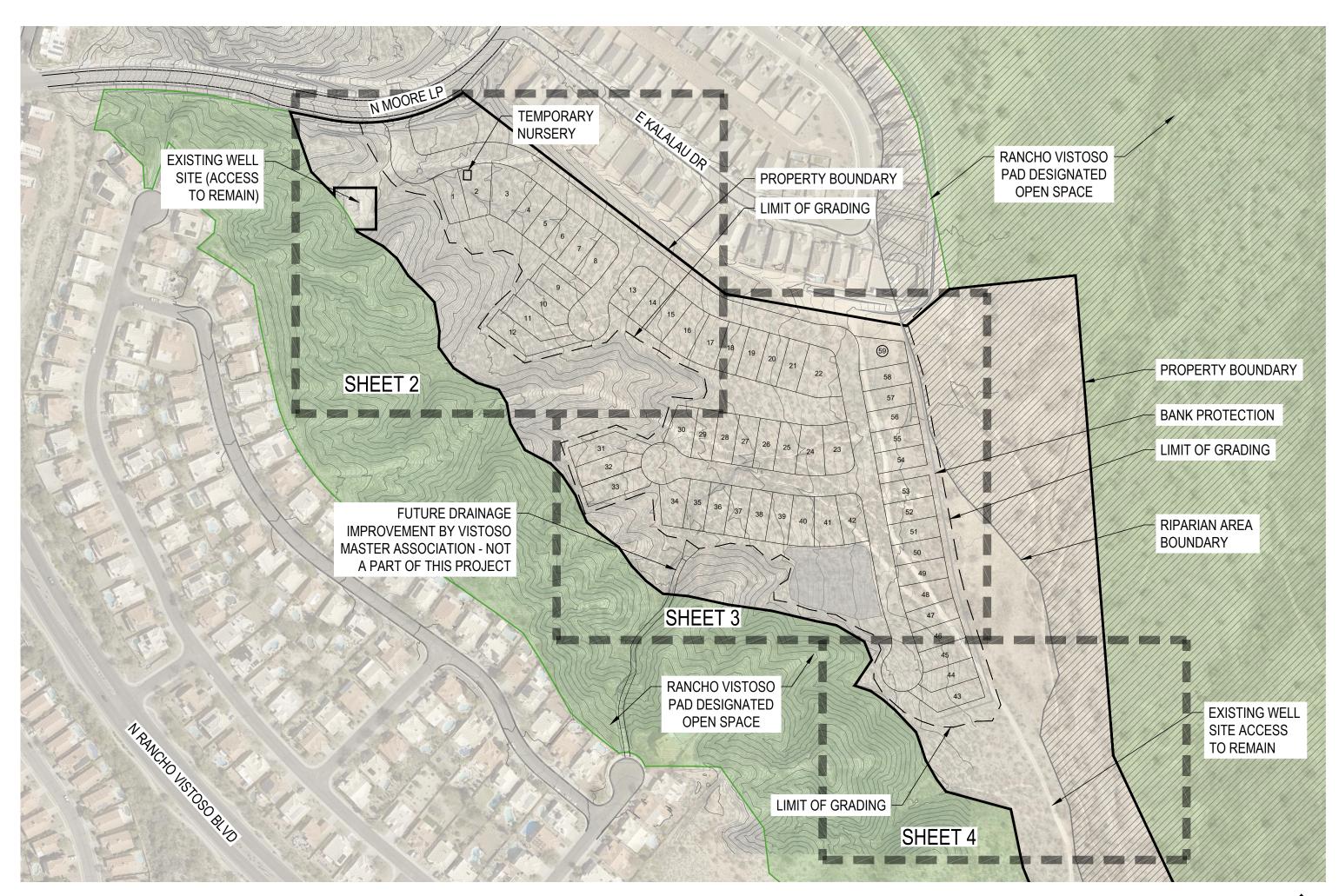
A landscape bufferyard will be provided around the entire project perimeter as required by the Oro Valley Zoning Code to help soften any visual impacts to surrounding landowners. The bufferyards will be planted with a variety of native species and will help blend this residential neighborhood with the surrounding developments. The bufferyard along the project's northern edge will also feature a block wall to provide additional visual screening to and from the Valley Vista subdivision. See Exhibit III-A-1: Tentative Development Plan and Exhibit III-O-1: Bufferyards.





APPENDIX A - SITE RESOURCE INVENTORY

SITE RESOURCE INVENTORY RANCHO VISTOSO 5R 2300043



PROJECT OVERVIEW





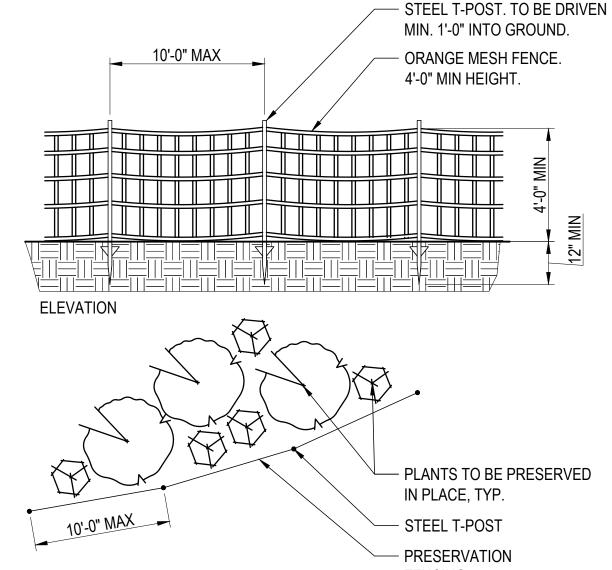
Botanical Name	Common Name	Preserve in Place (White Flagging)	Transplant (Blue Flagging)	Remove from Site (Red Flagging)	Remove from Site (Health - Red Flagging)	Total per Species
Parkinsonia florida	Blue Palo Verde				1	1
Parkinsonia microphylla	Foothill Palo Verde	3	1	8		12
Prosopis velutina	Velvet Mesquite	3		32	6	41
Vachellia constricta	Whitethorn Acacia			1		1
TOTAL ALL SPECIES	•	6	1	41	7	55

SIGNIFICANT VEGETATION MITIGATION

Required mitigation is per Table 27-1 and % Significant Vegetation disturbance. 55 Significant Trees were inventoried; 48 are designated for removal. Seven of the 48 trees are noted as untransplantable due to health. Percentage of viable Significant Vegetation to be removed from site (measured as the square footage of the ground cover area) is 84%.

Significant vegetation to be removed from site (measured as the square footage of the ground cover area) is 64%.						
Species	QTY of Viable SV to be Removed	Mitigation Ratio	Replacement Trees (36" Box)	Replacement Trees (48" Box)	Understory Plants Required	
Parkinsonia florida (Blue Palo Verde)	0	2:1	0	0	0	
Parkinsonia microphylla (Foothill Palo Verde)	8	2:1	8	8	80	
Prosopis velutina (Velvet Mesquite)	32	2:1	32	32	320	
Vachellia constricta (Whitethorn Acacia)	1	2:1	1	1	10	
TOTAL MITIGATION REQUIRED	41		41	41	410	

Mitigation planting shall be shown on the Landscape Plan. Under-story plants shall be selected from the Supplemental Native Plant List, Addendum C, and shall either be transplanted from on-site or nursery plants.



- FENCING 1. When excavating within 4'-0" from dripline of plants to be preserved in place, hand clear to
- minimize damage to root systems. 2. If roots are encountered during excavation, redirect roots into existing soil areas where
- possible. If redirection is not possible, cut roots cleanly with sharp pruning instruments. 3. Do not allow exposed and/or pruned roots to dry out. Provide temporary cover with peat moss, wrap with burlap, and maintain in a moist condition. Support and protect roots from further damage until they are permanently covered with soil.

PROTECTIVE FENCING

PROJECT OVERVIEW

- 1. Single family homes are proposed for the site.
- 2. Existing Site Conditions and Vegetative Community: The 2022 aerial imagery accurately reflects the current site conditions. Shrubby trees, mainly catclaw acacia (Senegalia greggii) and whitethorn acacia (Vachellia constricta), numerous cholla, and a dense understory of annual and perennial grasses dominate the site. Tree species include velvet mesquite (*Prosopis velutina*), foothill palo verde (*Parkinsonia* microphylla) and blue palo verde (Parkinsonia florida). Shrubs include desert hackberry (Celtis pallida) and graythorn (Ziziphus obtusifolia). Sub-shrubs and forbs include bursage (Ambrosia deltoidea), Wright's desertpeony (Acourtia wrightii) and burroweed (Isocoma tenuisecta). Cholla species (Cylindropuntia imbricata var. spinosior, versicolor, fulgida and leptocaulis) and barrel cacti (Ferocactus wislizeni) are the most common cacti on site; a few hedgehog (Echinocereus sp.) cacti were observed. Grasses were prominent on the site and included six-weeks needle grama (Bouteloua aristidoides), six-weeks gramma (Bouteloua barbata), bush muhly (Muhlenbergia porteri), Rothrock's grama (Bouteloua rothrockii), and purple three-awn (Aristida purpurea).

GENERAL NOTES

- 1. The gross area of development is 36.30 +/- acres
- 2. Total acres of graded area: 17.84 +/- acres
- 3. Total acres of undisturbed area: 18.46 +/- acres
- 4. The Site Resource Inventory (SRI) was conducted in compliance with Town of Oro Valley (TOV) code requirements (TOV Zoning Code Section 27.6.B.3). Plants listed in Table C-1: Oro Valley Protected Native Plant List, meeting the criteria for significant vegetation, were
- 5. Tagging and Flagging: All inventoried plants adhered to the following standards:
- Tagging: Plants were tagged with a metal tag embossed with an inventory number that cross references the Native Plant Inventory List
- and Native Plant Inventory Plan. Flagging: Color-coded flagging has been affixed to each inventoried plant:
 - White: Plants proposed for preservation in place (PIP)
 - Blue: Plants proposed for transplant on site (TOS) Red: Plants proposed for removal from site (RFS)
- 6. Any spaded or boxed tree transplanted on site that dies due to neglect or lack of maintenance shall be replaced with the same size and species of the original salvaged tree, as required by the salvage plan.
- 7. No salvage of plants regulated by the Endangered Species Act and/or the Arizona Native Plant Law may occur without the issuance of the appropriate permit by the State Department of Agriculture.
- 8. Salvage operations shall not commence until the Zoning inspector has performed an inspection and given approval to be salvaged.
- 9. Temporary nursery shall be in conformance with Section 27.6.B.4.j.
- 10. Mitigation of Significant Vegetation shall be in accordance with Table 27-1 Mitigation of Significant Vegetation.
- 11. Any plant that meets the salvage criteria in Section 27.6.B.4 shall be preserved in place or transplanted on-site. Any plants that meet the salvage criteria that are destroyed shall be replaced on a one-to-one ratio of the same species and size as that destroyed. Five understory plants from the supplemental Arizona Department of Water Quality native plant list will be planted for every mitigated tree.
- 12. The limits of grading shall be staked in the field, in accordance with Section 27.6. B.7.c.ii. Disturbance outside the approved grading limits
- 13. A native plant inventory shall be conducted, and native plant plans shall be submitted with the Conceptual Site Plan or Final Site Plan (as directed by the Town) for the project.
- 14. Plant locations were determined with the assistance of a global positioning system. This system is accurate to within approximately one foot.

SIGNIFICANT VEGETATION INFORMATION

- 1. No stands of Significant Vegetation were noted.
- 2. There are no saguaros located within the grading limits 3. Significant Vegetation Information:
- a. Total amount of Significant Vegetation present within Grading Limits (canopy diameter assessed as two times the height of tree): 27,256 SF
- b. Total amount being disturbed: 22,938 SF c. Total percentage disturbed: 84%
- d. Mitigation Ratio: 2:1
- 4. Required mitigation plants shall be reflected in the Landscape Plans for this project.

PLANT TRANSPLANTABILITY CRITERIA

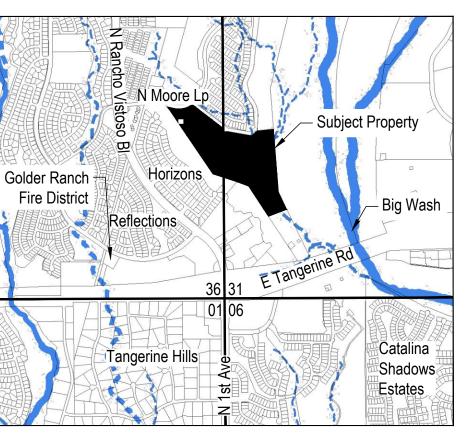
Determination of Plant Transplantability is based upon the criteria listed in Section 27.6.B.c.iii of the TOV Zoning Code. All plants that meet the following criteria shall be preserved in place or salvaged. Plants that do not meet these criteria should not be considered for salvage and

- A. HEALTH: Plant health is good to excellent with no major infestations or apparent diseases. "Plant health" is defined as a plant in a sound state, free from disease and expected to survive for five (5) or more years.
- B. SIZE & AGE: The plant is of a size and age to suggest a likely chance of transplant survival.
- C. SPADEABILITY/DAMAGE: Plant is undamaged and is conducive to box or spade transplanting (upright branching).
- D. SOILS: Soils can be excavated, are cohesive, and appear capable of supporting a boxed or spaded root ball.
- E. TOPOGRAPHY: Surrounding topography permits access with the appropriate equipment needed to box or spade and remove the plant. F. ADJACENT PLANTS: Adjacent plants do not pose a likely interference with root systems or interfere with plant removal.

G. FORM: The overall form and character is representative of the species and is a valuable specimen for landscape or habitat purposes.

INVASIVE SPECIES

- 1. The site has a low to moderate presence of invasive grass species. These include:
- a. Buffelgrass (*Pennisetum ciliare*), an invasive grass species included on the Oro Valley Prohibited Plant List (Addendum E).
- b. Soft Feather Pappusgrass (Enneapogon cenchroides) is native to Africa. Like buffelgrass, it displaces native vegetation and is a fire fuel
- c. Stinkgrass (*Eragrostis cilianensis*) is native to Africa. Like buffelgrass, it displaces native vegetation and is a fire fuel source.
- 2. Buffelgrass only several plants were observed.
- 3. Pappusgrass and stinkgrass were present at various locations throughout the site.
- 4. Invasive species within the project area should be removed (via mechanical or chemical means) from the site prior to the start of earth
- disturbance for construction.
- 5. Continual monitoring for invasive species, and removal, is recommended.



LOCATION MAP

Portion of Section 36, Township 11S, Range 13E + 3" = 1 Mile Section 31, Township 11S, Range 14E G. & S.R.M., Town of Oro Valley, Pima County, Arizona

ASSESSOR PARCEL NUMBERS (APN): 219-54-006D and 219-20-914B

SHEET INDEX

- 1 SITE RESOURCE INVENTORY COVER SHEET & SUMMARY TABLES
- 2 3 SITE RESOURCE INVENTORY PLAN SITE RESOURCE INVENTORY PLAN & **INVENTORY TABLES**

OWNER

VISTOSO PARTNERS LLC

ATTENTION: DICK MAES PH: 480-831-2000 EMAIL: RICHARDM@WHOLDINGS.COM

DEVELOPER

MGS VISTOSO LLC

ATTENTION: MARK WINKLEMAN PH: 602-432-5955 EMAIL: MW@MGSREALTY.COM

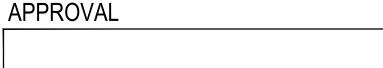
LANDSCAPE ARCHITECT

- WILDER LANDSCAPE ARCHITECTS
- 2738 E. ADAMS STREET TUCSON, AZ 85716
- PHONE: 520-320-3936 ATTENTION: JENNIFER PATTON, PLA

JENNIFER@WILDERLA.COM

SYMBOL / LINETYPE LEGEND

SYMBOL	ELEMENT
	PAD Open Space Boundary
	Property Boundary
	Limit of Grading (where it differs from Property Boundary)
	Bank Protection
	Existing Contour, 1' Interval
xxx	Preservation Fencing



PLANNING & ZONING ADMINISTRATOR DATE

SITE RESOURCE INVENTORY COVER SHEET

AND SUMMARY TABLES

Rancho Vistoso 5R

ORO VALLEY CASE #: 2300043

Portion of Section 36, Township 11S, Range 13E + Section 31, Township 11S, Range 14E G. & S.R.M., Town of Oro Valley, Pima County, Arizona

Description

Designed By: Wilder Team; Checked By: JP

Date: May 26, 2023

REVISIONS:

Rev. # Date

REF CASE #: 2201373, 2300042

SHEET 1 OF 4

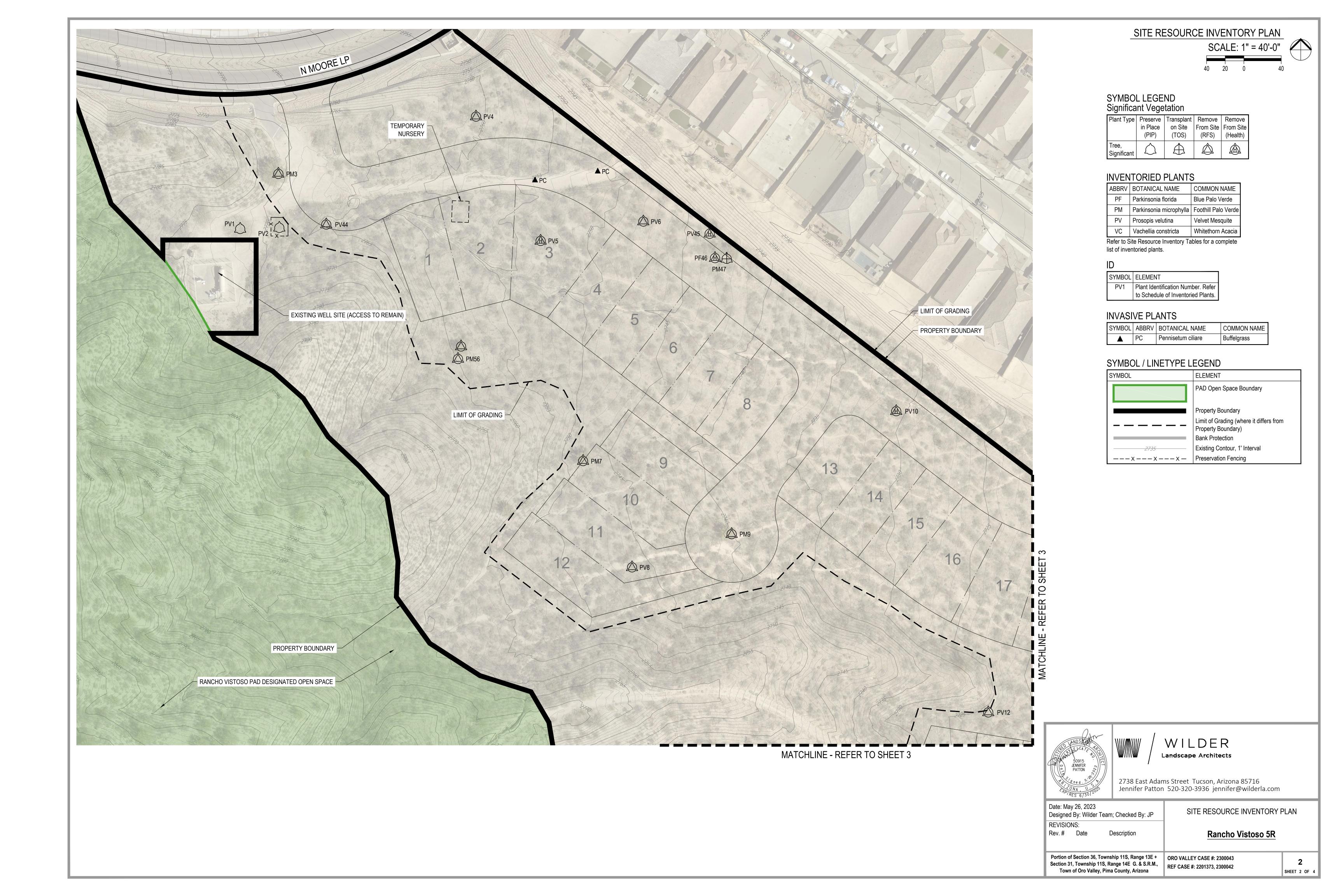
Contact Arizona 811 at least two full vorking days before you begin exc AR ZONA811 Call 811 or click Arizona811.com

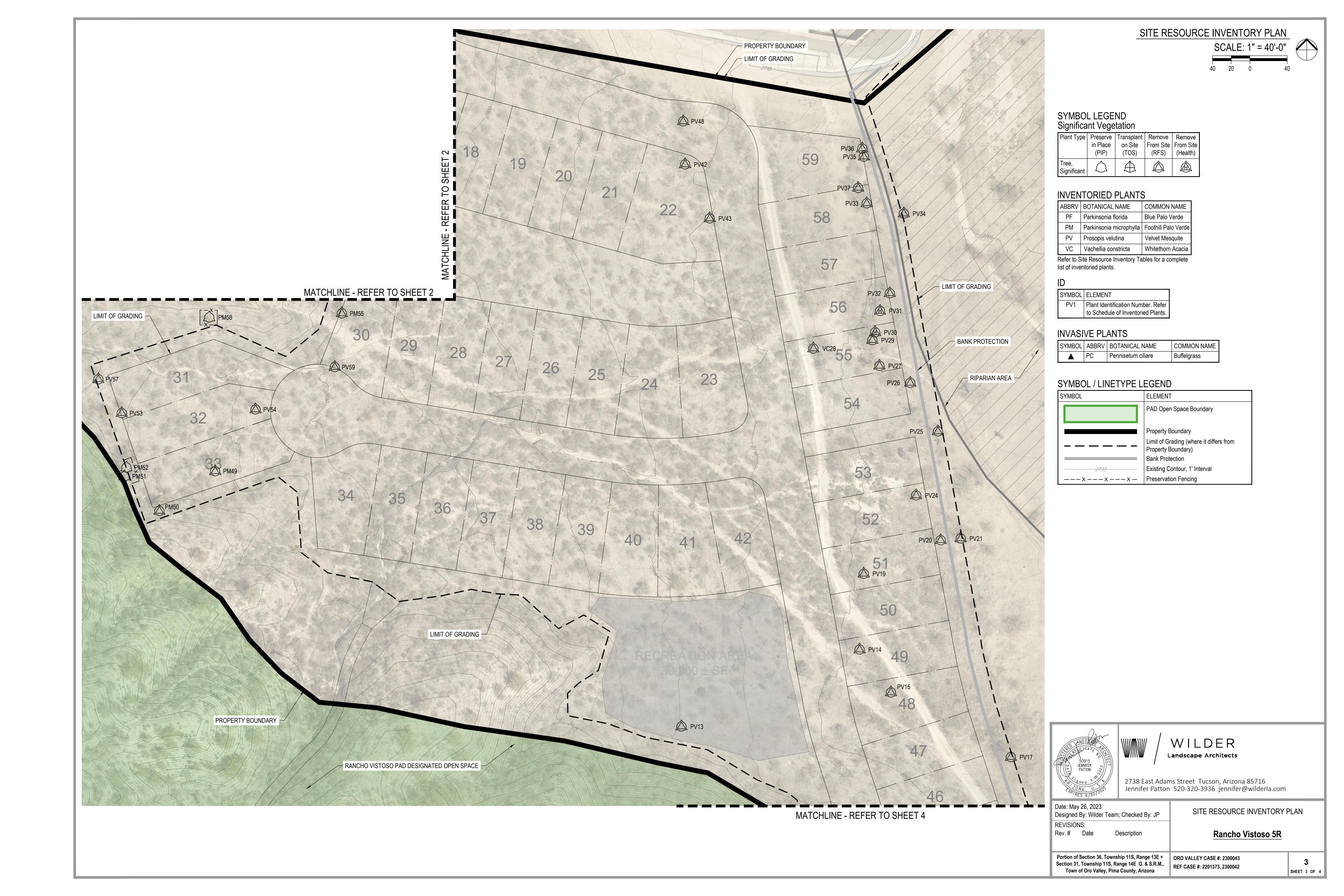
NTS

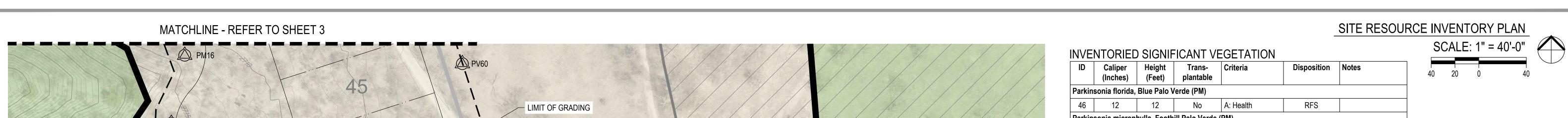


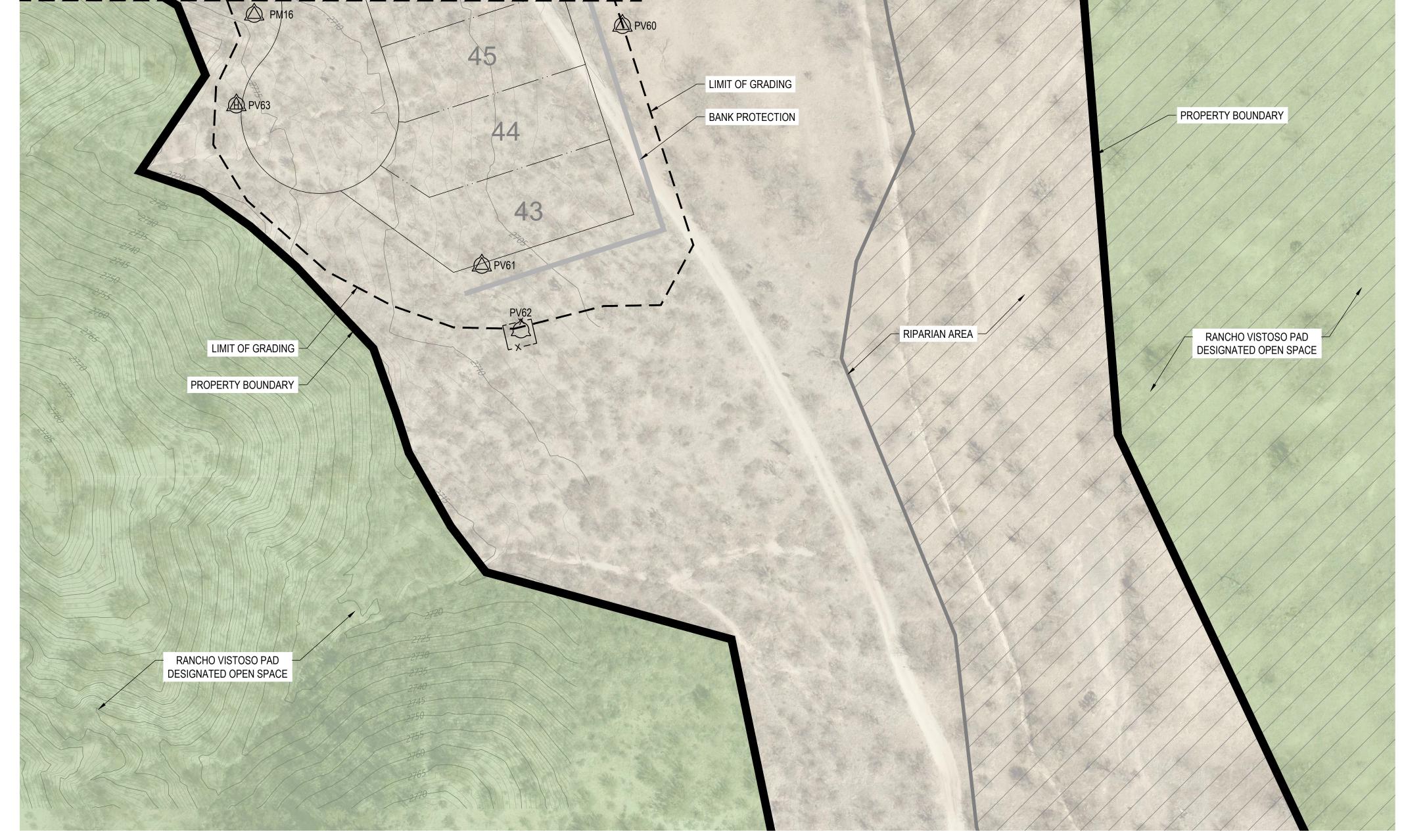
Jennifer Patton, 520-320-3936

jennifer@wilderla.com









SYMBOL LEGEND Significant Vegetation

olgrinicant vegetation					
Plant Type	Preserve	Transplant	Remove	Remove	
	in Place (PIP)		From Site (RFS)	From Site (Health)	
Tree, Significant	\triangle	\oplus			

INIVENITABLED DI ANTS

INVENTORIED PLANTS							
ABBRV	BOTANICAL NAME	COMMON NAME					
PF	Parkinsonia florida	Blue Palo Verde					
PM	Parkinsonia microphylla	Foothill Palo Verde					
PV	Prosopis velutina	Velvet Mesquite					
VC	Vachellia constricta	Whitethorn Acacia					

Refer to Site Resource Inventory Tables for a complete list of inventoried plants.

_		
SYMBOL		ELEMENT
	PV1	Plant Identification Number. Refer to Schedule of Inventoried Plants.

INVASIVE PLANTS

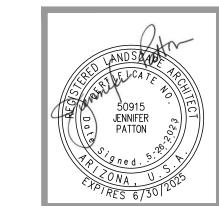
SYMBOL	ABBRV	BOTANICAL NAME	COMMON NAME				
A	PC	Pennisetum ciliare	Buffelgrass				

SYMBOL	/ I INFTYPE	I EGEND

SYMBOL/LINETYPE LEGEND		
SYMBOL	ELEMENT	
	PAD Open Space Boundary	
	Property Boundary	
	Limit of Grading (where it differs from Property Boundary)	
	Bank Protection	
2735	Existing Contour, 1' Interval	
xx-	Preservation Fencing	

NVENTORIED SIGNIFICANT VEGETATION						
ID	Caliper (Inches)	Height (Feet)	Trans- plantable	Criteria	Disposition	Notes
Parkin	sonia florida,		erde (PM)	,		1
46	12	12	No	A: Health	RFS	
Parkin	sonia micropl	hylla, Footh	ill Palo Verde ((PM)		
3	13	15	No	B: Size and Age	RFS	
7	12	12	No	B: Size and Age	RFS	Boxing Candidate
9	12	13	No	B: Size and Age	RFS	Boxing Candidate
16	12	12	Yes	B: Size and Age	RFS	
47	12	12	Yes		TOS	
49	12	12	No	B: Size and Age	RFS	
50	12	12	No	B: Size and Age	RFS	
51	15	15	No	B: Size and Age	PIP	
52	20	18	No	B: Size and Age	PIP	
55 56	12	12	No	E: Topography C: Spadoability	RFS	
56	12	14	No	C: Spadeability	RFS	
58 Proso r	12 pis velutina, V	12 Yelvet Mesqi	Yes uite (PV)		PIP	
1	20	17	No	B: Size and Age	PIP	
2	12	15	No	B: Size and Age	PIP	
4	13	12	No	B: Size and Age	RFS	
5	12	12	No	A: Health	RFS	
6	30	12	No	B: Size and Age	RFS	
8	12	13	No	B: Size and Age	RFS	
10	19	16	No	A: Health	RFS	
12	12	12	No	B: Size and Age	RFS	
13	12	12	No	B: Size and Age	RFS	
14	12	15	No	B: Size and Age	RFS	
15	19	16	No	B: Size and Age	RFS	
17	24	18	No	B: Size and Age	RFS	
19	12	13	No	B: Size and Age	RFS	
20	13	13	No	B: Size and Age	RFS	
21	12	12	No	F: Adjacent Plants	RFS	
24	12	13	No	B: Size and Age	RFS	
25	12	12	No	B: Size and Age	RFS	
26	14	14	Yes	B: Size and Age	RFS	
27	12	13	No	B: Size and Age B: Size and Age	RFS	
29 30	19 12	13 12	No No	A: Health	RFS RFS	
31	15	13	Yes	A: Health	RFS	
32	14	13	No	B: Size and Age	RFS	
33	13	13	No	B: Size and Age	RFS	
34	24	12	No	B: Size and Age	RFS	
35	16	15	No	B: Size and Age	RFS	
36	12	13	No	B: Size and Age	RFS	
37	12	14	No	B: Size and Age	RFS	
42	27	16	No	B: Size and Age	RFS	
43	26	12	No	B: Size and Age	RFS	
44	12	18	No	E: Topography	RFS	
45	22	12	No	A: Health	RFS	
48	30	16	No	B: Size and Age	RFS	
53	12	12	No	B: Size and Age	RFS	
54	15	14	No	B: Size and Age	RFS	
57	13	12	No	B: Size and Age	RFS	
59	12	12	No	G: Form	RFS	
60	18	14	No	B: Size and Age	RFS	
61	13	13	No	B: Size and Age	RFS	
62	13	15	No	B: Size and Age	PIP	
63 Vachal	15	14	No Access (VC)	A: Health	RFS	
			n Acacia (VC)	R. Cizo and Ass	DEC	
28	12	13	No	B: Size and Age	RFS	

Note: Inventory numbers 11, 18, 22, 23 & 38 - 41 are unused.





2738 East Adams Street Tucson, Arizona 85716 Jennifer Patton 520-320-3936 jennifer@wilderla.com

Date: May 26, 2023 Designed By: Wilder Team; Checked By: JP			
REVISIONS:			
Rev.#	Date	Description	

SITE RESOURCE INVENTORY PLAN AND INVENTORY TABLES Rancho Vistoso 5R

Portion of Section 36, Township 11S, Range 13E +
Section 31, Township 11S, Range 14E G. & S.R.M.,
Town of Oro Valley, Pima County, Arizona

ORO VALLEY CASE #: 2300043

REF CASE #: 2201373, 2300042

SHEET 4 OF 4

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