AVILLA RANCHO VISTOSO (EAST)

REZONING SITE ANALYSIS

(2200136)

PREPARED FOR:

NEXMETRO COMMUNITIES
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PREPARED BY:

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(520) 664-4304

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Bowman

WILDER
Landscape Architects

CivTech

JUNE 2022

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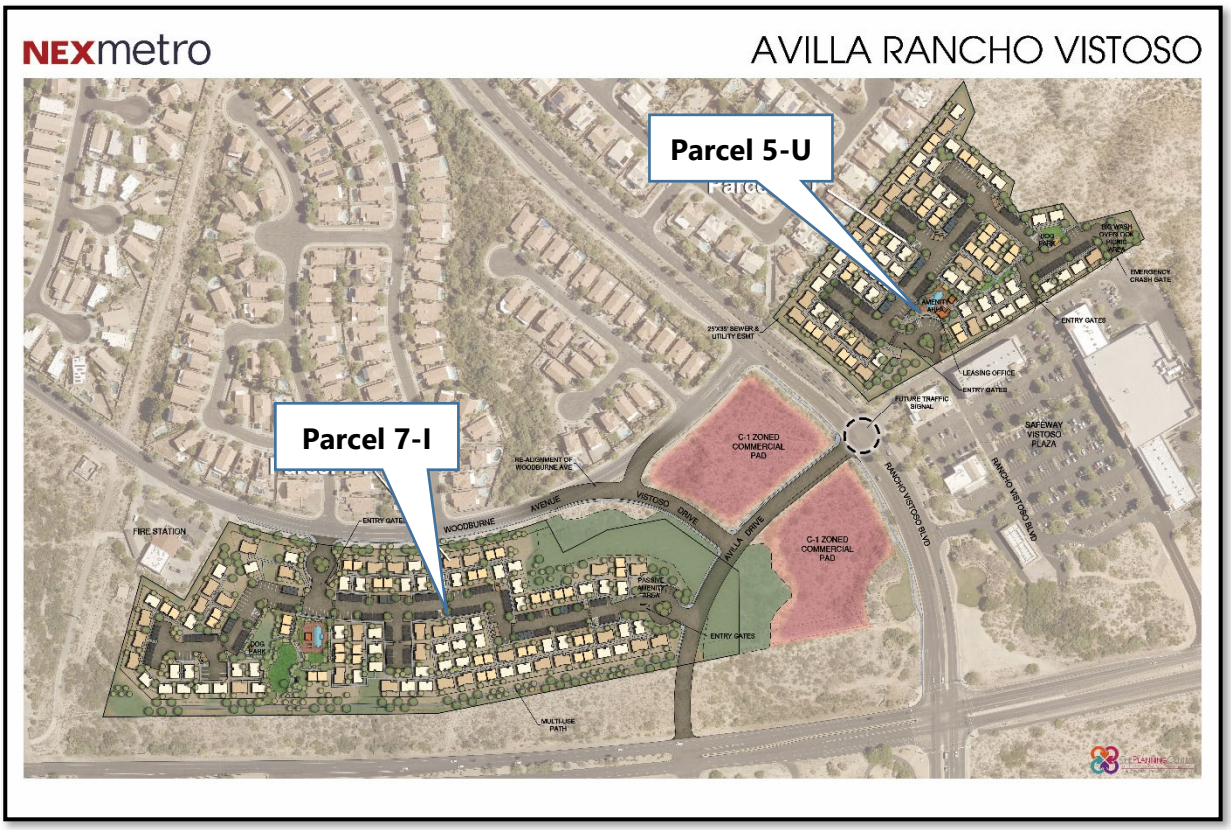
I. INTRODUCTION

A. PROJECT OVERVIEW

Avilla Rancho Vistoso is a proposed residential leased home neighborhood located within the Rancho Vistoso Planned Area Development. The project includes portions of Parcel 5-U and 7-I of the PAD. Because the parcels have different underlying ownership they must be processed as two separate rezoning requests. This Site Analysis is applicable to Parcel 5-U, which is the Eastern portion of the project. The Subject Property (the "Property") consists of 8.0± acres and is currently undeveloped. The Property is located just north of the Safeway Shopping Center at the northeast corner of Tangerine Road and Rancho Vistoso Blvd. in Oro Valley, Arizona. As a master planned community, Rancho Vistoso appropriately included sufficient commercial land to meet the needs of its anticipated population. However, over the years Rancho Vistoso has developed at roughly two-thirds of its originally envisioned residential density. A commensurate drop in need for commercial land has resulted, which has caused this and other commercially zoned properties to remain undeveloped. As Rancho Vistoso rapidly approaches build-out, the prospects grow dim that enough additional homes will be built in the area to support the development of the smaller, neighborhood-level commercial lands such as this one within the PAD. The Your Voice Our Future General Plan designates this Property as Neighborhood Commercial / Office within a Tier 2 Growth Area and is appropriate for the Property, as proposed. The Property is surrounded by residential developments, a commercial shopping center, undeveloped parcels, and open space.



This document has been prepared in support of a request to rezone the Property from "C-1 Commercial District" within the Rancho Vistoso PAD to "HDR High-Density Residential," in the PAD in order to allow the development as proposed. HDR is allowed as a comparable zone to R-6 under the Oro Valley General Plan's Neighborhood Commercial / Office land use designation.

B. PRIMARY OBJECTIVES

- Provide much needed high-quality, energy efficient, single-family, rental casitas for new residents wishing to live 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.

- Provide a residential transition between the commercial properties to the south and the residential neighborhoods to the north.

- Provide additional customers for local businesses, which also bolsters Oro Valley's tax base.

- Fill an unmet demand within Oro Valley's spectrum of housing options.

- Provide additional housing options in response to needs expressed by some of Oro Valley's largest employers.

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 8.0± acres located in the Town of Oro Valley in Section 36, Township 11 south, Range 13 east, Pima County Arizona. The site is northeast of Tangerine Road and Rancho Vistoso Blvd., just north of the Safeway Shopping Center in the Rancho Vistoso PAD. The Pima County tax assessor designates the subject property as parcel number 219-54-003B. See Exhibit II-A-1: Site Location Map.

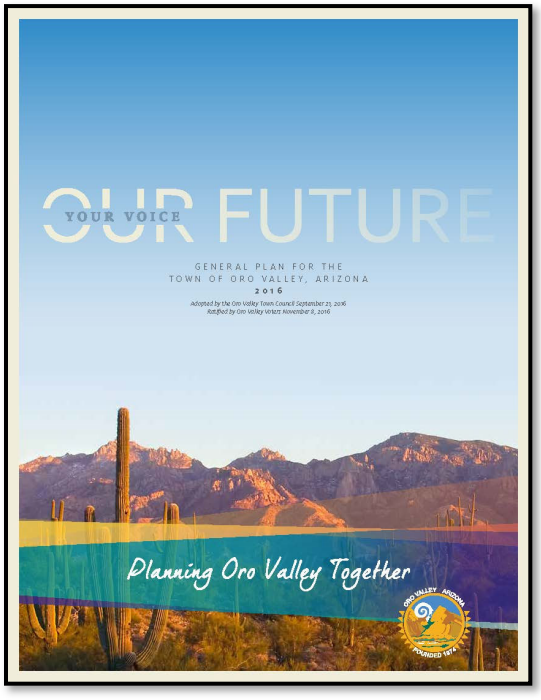
   The Project's administrative address is 12176 N Rancho Vistoso Blvd.

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 C-1 (Commercial District) and Open Space in the Rancho Vistoso PAD.

   The Your Voice Our Future General Plan designates this Property as Neighborhood Commercial / Office within a Tier 2 Growth Area and is appropriate for the Property, as proposed. As stated in the General Plan, Growth Areas are areas "that are particularly suitable for planned multimodal transportation and infrastructure expansion and improvements designed to support a planned concentration of a variety of uses, such as residential, office, commercial, tourism and industrial uses. These areas are open for a range of more intensive development."



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:	Existing zoning:	HDR (High Density Residential – PAD) & Open Space - PAD
	Existing land use:	Horizons Single-Family Residential Subdivision & Vacant Land
NE:	Existing zoning:	Open Space – PAD & CI (Cultural Institutional -PAD)
	Existing land use:	Vacant Land
E:	Existing zoning:	Open Space - PAD
	Existing land use:	Vacant Land & Big Wash
SE:	Existing zoning:	Open Space - PAD
	Existing land use:	Vacant Land
S:	Existing zoning:	C-1 (Community Commercial – PAD)
	Existing land use:	Safeway Vistoso Plaza Shopping Center
SW:	Existing zoning:	C-1 (Community Commercial – PAD)
	Existing land use:	Rancho Vistoso Blvd. & Vacant Land
W:	Existing zoning:	C-1 (Community Commercial – PAD) & HDR (High Density Residential – PAD)
	Existing land use:	Rancho Vistoso Blvd. & Reflections Single-Family Residential Subdivision
NW:	Existing zoning:	HDR (High Density Residential – PAD)
	Existing land use:	Horizons Single-Family Residential Subdivision

ii. Surrounding Building Heights

Surrounding buildings are a mixture of one & two story, with residential structures up to approximately 24 feet and commercial structures up to 34 feet in height.

iii. Nearby Pending Rezonings

Parcel 7-I, which is the Western portion of Avilla Rancho Vistoso, is proposed several hundred feet to the west of the property.

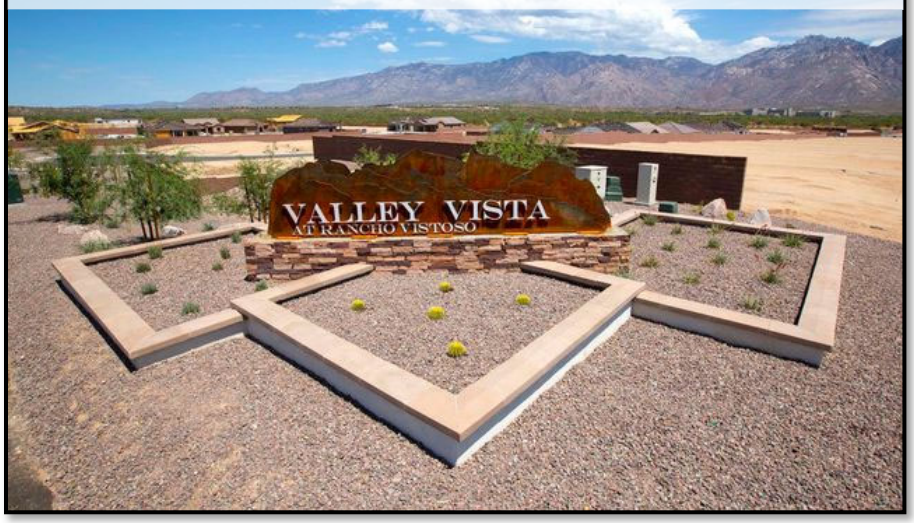
iv. Nearby Conditionally Approved Rezonings

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

v. Nearby Approved Subdivisions & Development Plans

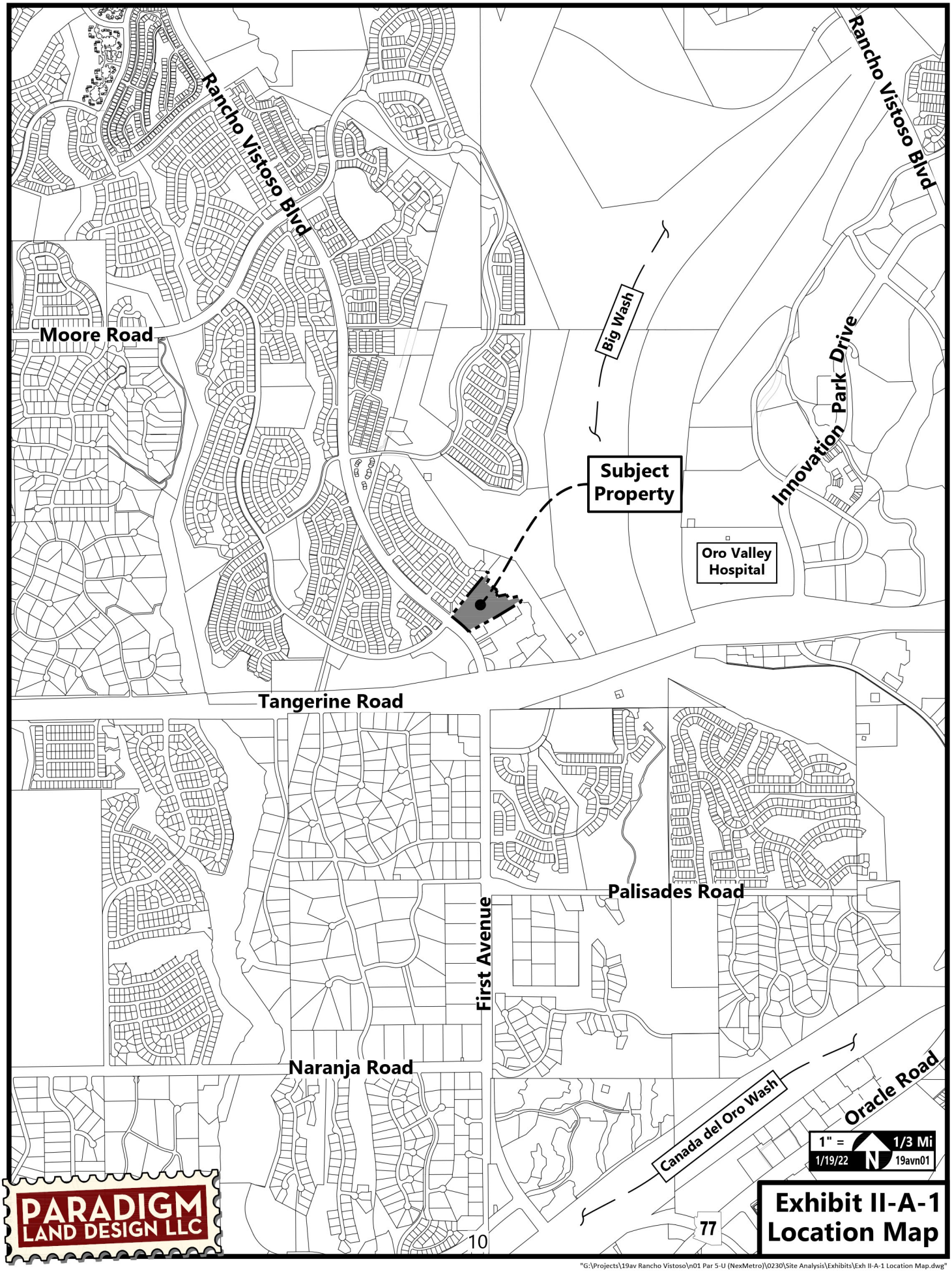
The Valley Vista at Rancho Vistoso Subdivision has recently been approved and is currently under construction. It is approximately one-quarter mile north of the subject property.

Valley Vista Entry Monument



vi. Architectural Styles used in Adjacent Properties

The architectural styles used in adjacent residential and commercial projects are mainly wood frame or block construction that utilize a stucco and/or stone veneer and have either a flat or tiled roof.



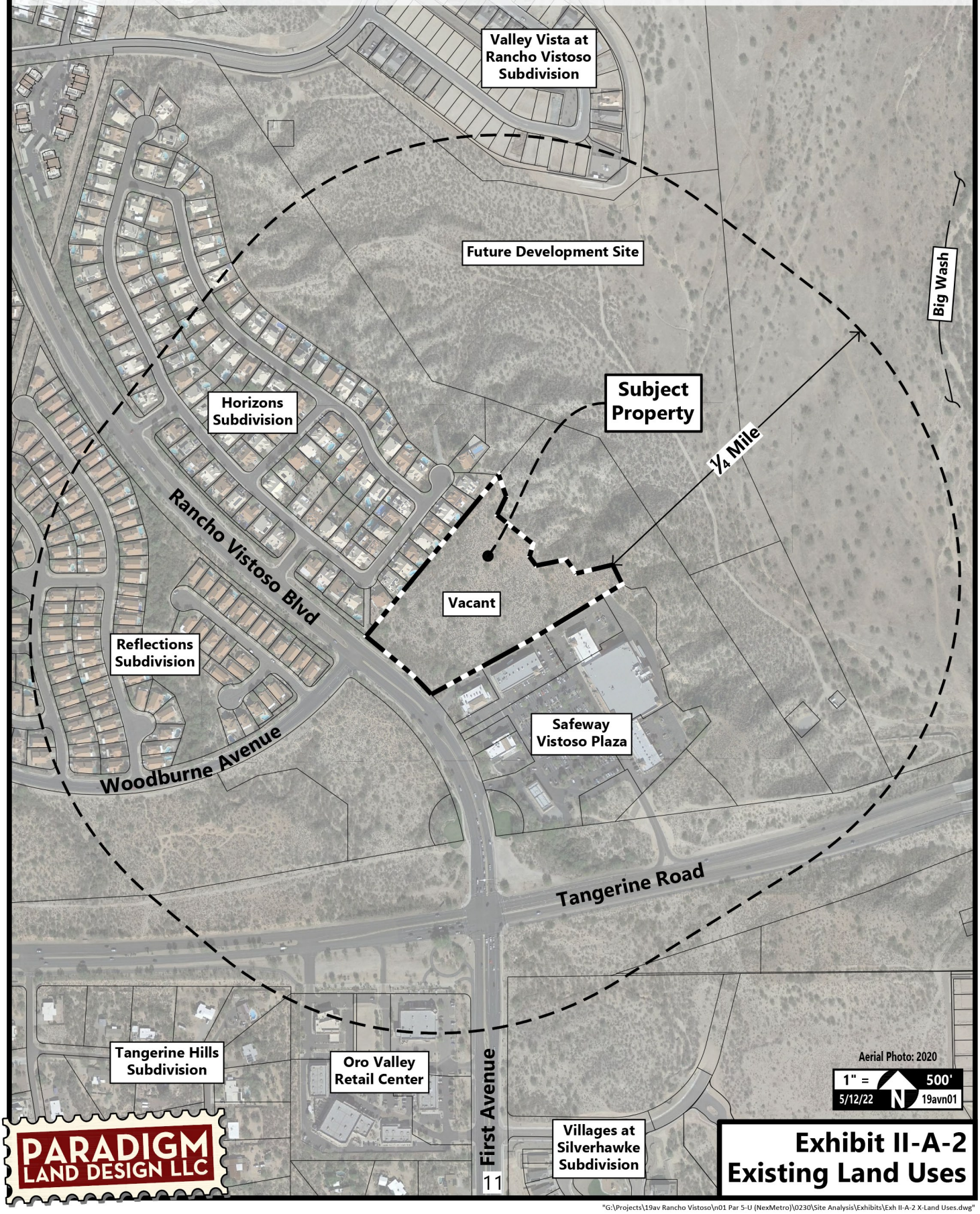
PARADIGM LAND DESIGN LLC

Exhibit II-A-1 Location Map

"G:\Projects\19av Rancho Vistoso\n01 Par 5-U (NexMetro)\0230\Site Analysis\Exhibits\Exh II-A-1 Location Map.dwg"

Note

- Surrounding buildings are a mixture of one & two story, with residential structures up to approximately 24 feet and commercial structures up to 34 feet in height.



PARADIGM LAND DESIGN LLC

Exhibit II-A-2
Existing Land Uses

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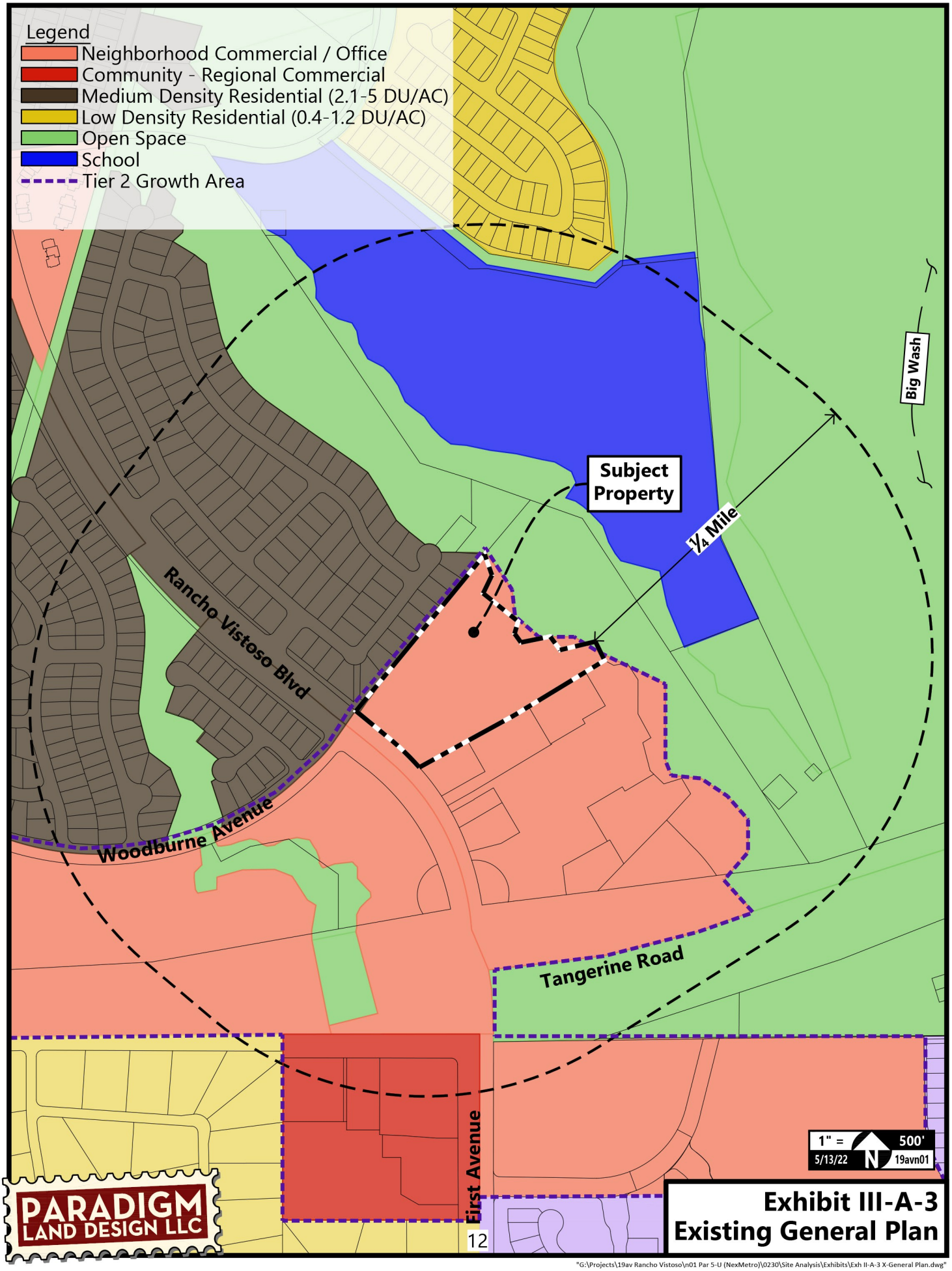
Legend
Neighborhood Commercial / Office
Community - Regional Commercial
Medium Density Residential (2.1-5 DU/AC)
Low Density Residential (0.4-1.2 DU/AC)
Open Space
School
Tier 2 Growth Area
Subject Property
¼ Mile
Big Wash
Rancho Vistoso Blvd
Woodburne Avenue
Tangerine Road
First Avenue
1" = 500'
5/13/22
N
19avn01
PARADIGM LAND DESIGN LLC
Exhibit III-A-3
Existing General Plan
12
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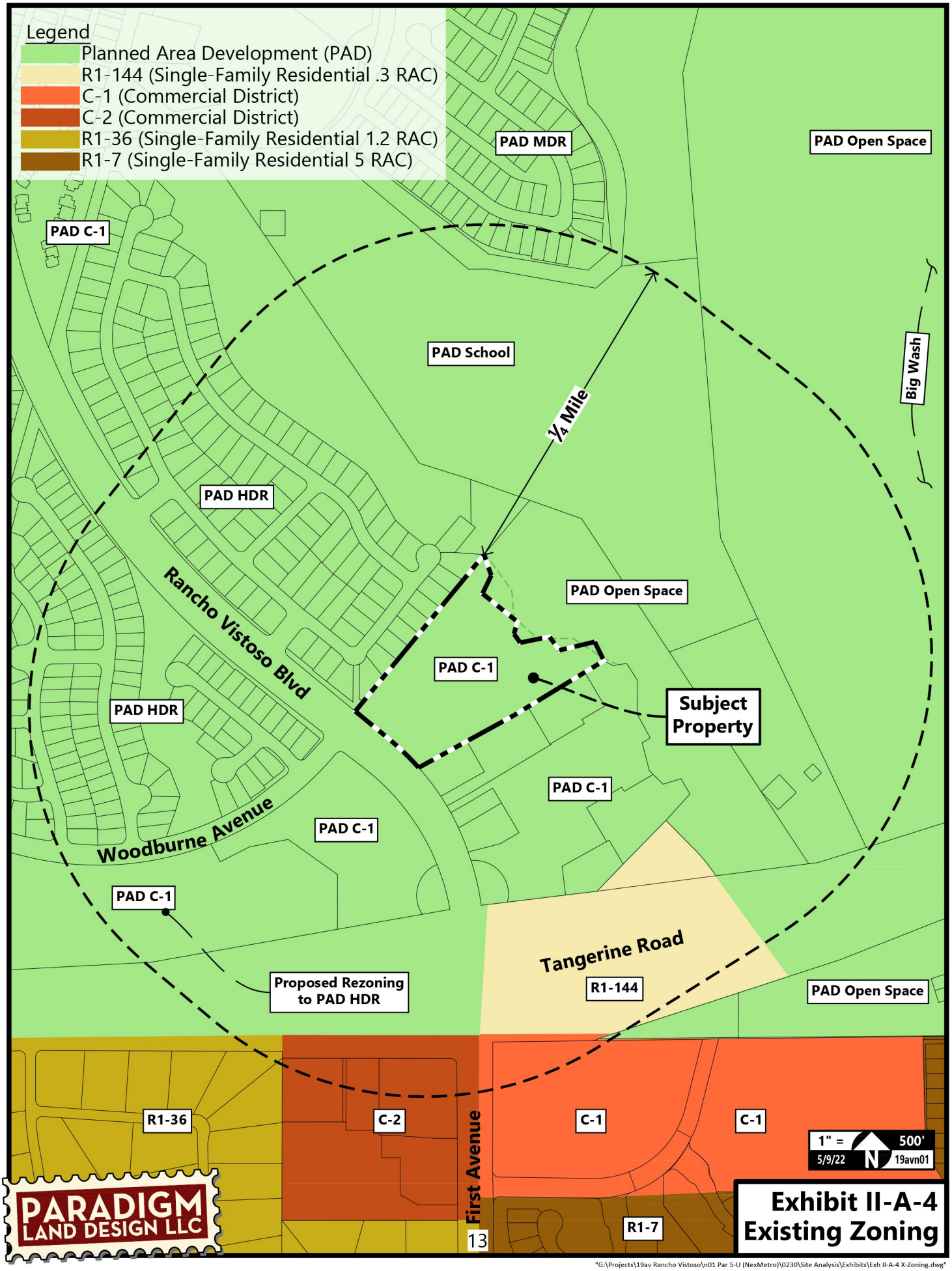
Legend
Planned Area Development (PAD)
R1-144 (Single-Family Residential .3 RAC)
C-1 (Commercial District)
C-2 (Commercial District)
R1-36 (Single-Family Residential 1.2 RAC)
R1-7 (Single-Family Residential 5 RAC)
PAD MDR
PAD Open Space
PAD C-1
PAD School
¼ Mile
Big Wash
PAD HDR
Rancho Vistoso Blvd
PAD Open Space
PAD C-1
Subject Property
PAD HDR
PAD C-1
Woodburne Avenue
PAD C-1
PAD C-1
Tangerine Road
Proposed Rezoning to PAD HDR
R1-144
PAD Open Space
R1-36
C-2
First Avenue
C-1
C-1
R1-7
1" = 500'
5/9/22
N
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PARADIGM LAND DESIGN LLC
Exhibit II-A-4
Existing Zoning
13
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B. ENVIRONMENTALLY SENSITIVE LANDS (ESL)

1. ESL Categories Onsite

   ESL does not apply to this site because it is in Rancho Vistoso.

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

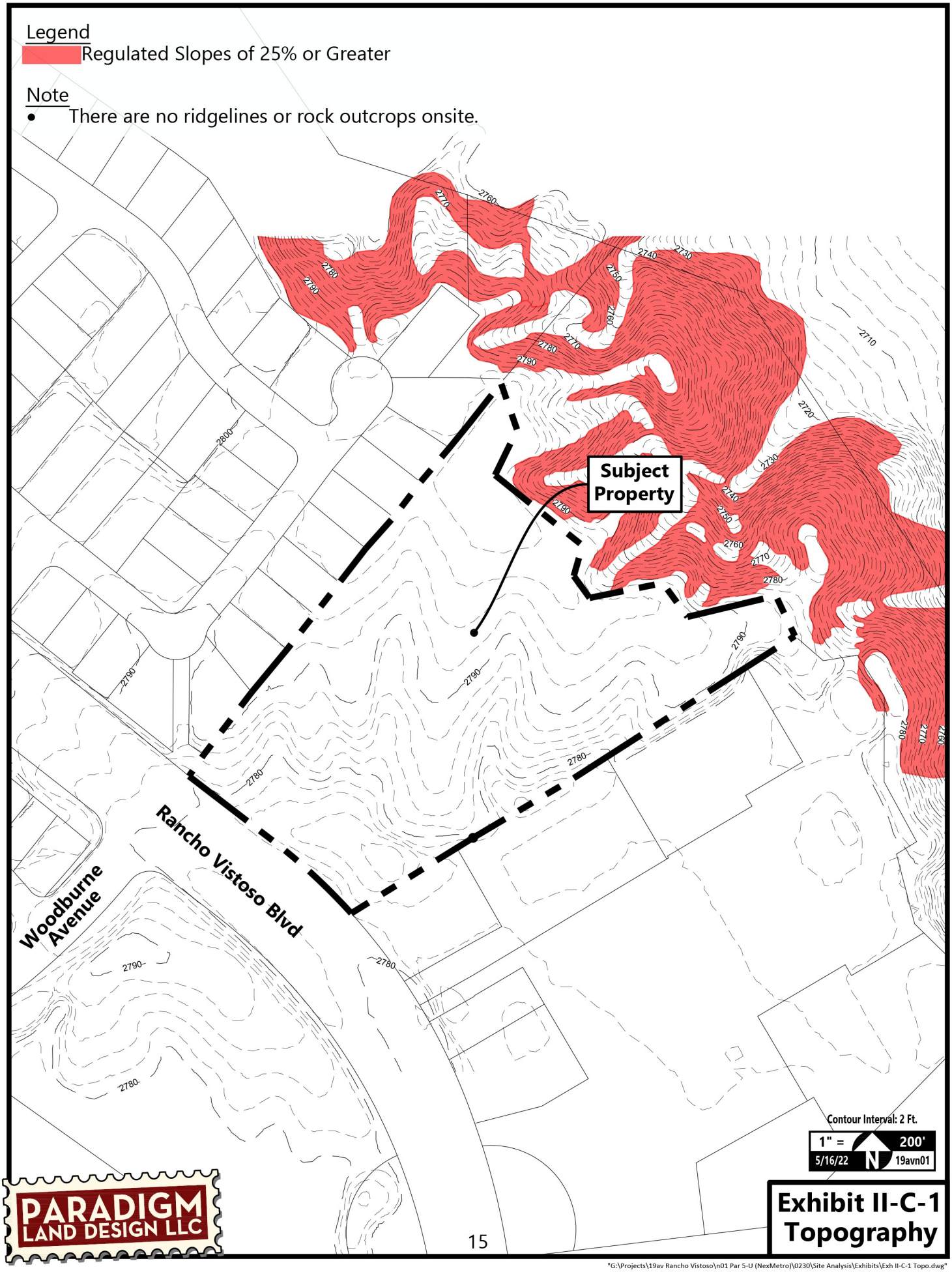
Conservation Category	Acreage
Major Wildlife Linkage	0
Critical resource Area	0
Core Resource Area	0
Resource Management Area Tier 1	0
Resource Management Area Tier 2	0
Resource Management Area Tier 3	8.0±

C. TOPOGRAPHY

1. Topographic Characteristics

   The topography of the Property is characterized by relatively flat terrain and some undulating areas towards the rear of the property where it drops off towards the Big Wash. The property generally slopes gently downward from north to south. Elevations range from approximately 2,796 feet above sea level at the northern corner to approximately 2,764 feet above sea level at the existing culvert near the southern corner of the property. The Property does not contain any hillside conservation areas, rock outcrops, regulated slopes of 25% or greater, or other significant topographic features. See Exhibit II-C-1: Topography.

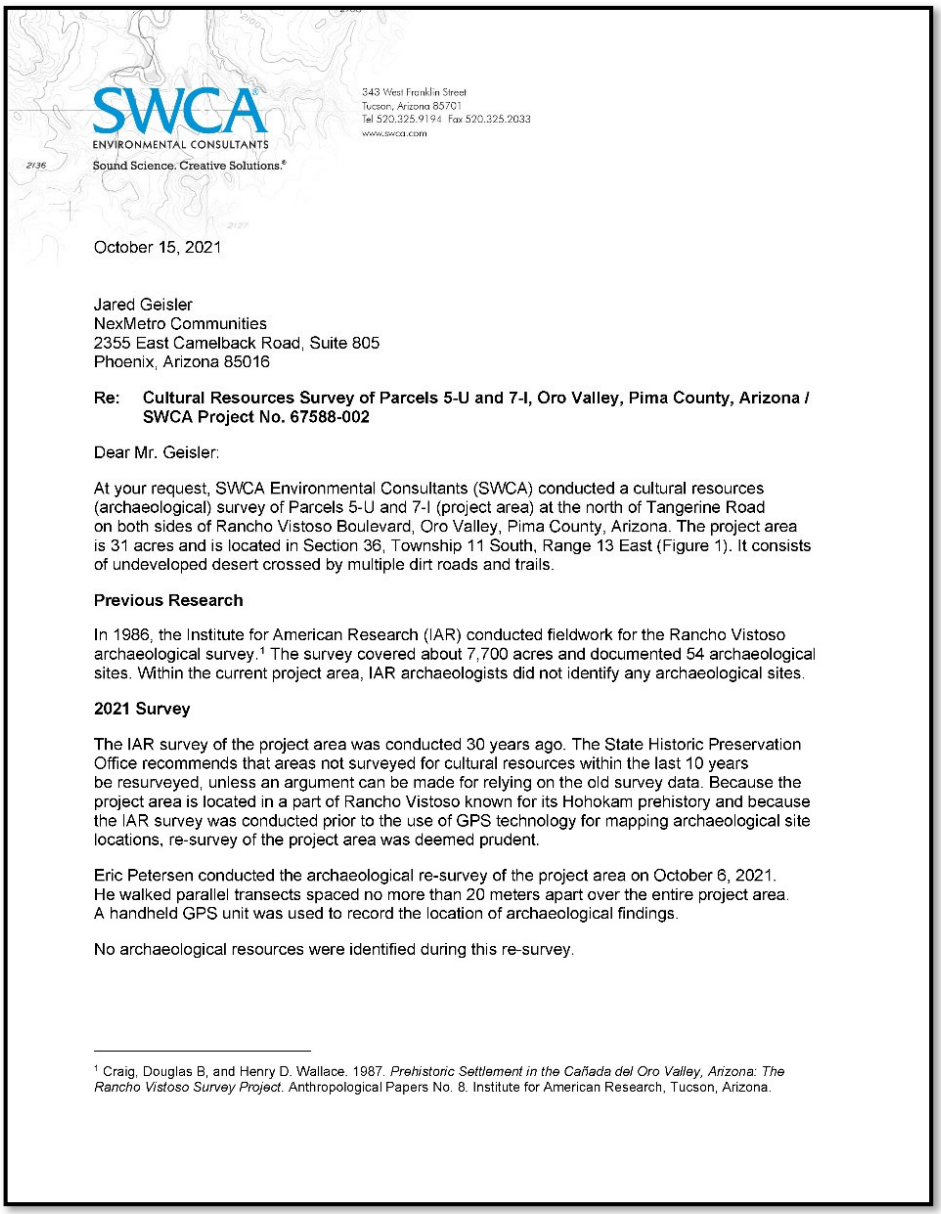
Regulated Topographic Feature Category	Acreage
15% to less than 18%	0
18% to less than 20%	0
20% to less than 25%	0
25% to less than 33%	0
33% or greater	0
Ridgelines	0
Rock Outcrops & Boulders	0


Legend
Regulated Slopes of 25% or Greater
Note
There are no ridgelines or rock outcrops onsite.
Subject Property
Rancho Vistoso Blvd
Woodburne Avenue
Contour Interval: 2 Ft.
1" = 200'
5/16/22
N
19avn01
PARADIGM LAND DESIGN LLC
Exhibit II-C-1
Topography
"G:\Projects\19av Rancho Vistoso\n01 Par 5-U (NexMetro)\0230\Site Analysis\Exhibits\Exh II-C-1 Topo.dwg"

D. CULTURAL / ARCHAEOLOGICAL / HISTORIC RESOURCES

The subject property was intensively surveyed in 1986 by the Institute for American Research (IAR), as part of the "Rancho Vistoso Survey". The survey covered about 7,700 acres and documented 54 archaeological sites. Within the subject property, IAR archaeologists did not identify any archaeological sites. Because this original survey was conducted over 30 years ago, the subject property was recently resurveyed by SWC16A Environmental Consultants (SWCA) in October 2021. No archaeological resources were identified 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.



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October 15, 2021

Jared Geisler
NexMetro Communities
2355 East Camelback Road, Suite 805
Phoenix, Arizona 85016

Re: Cultural Resources Survey of Parcels 5-U and 7-I, Oro Valley, Pima County, Arizona / SWCA Project No. 67588-002

Dear Mr. Geisler:

At your request, SWCA Environmental Consultants (SWCA) conducted a cultural resources (archaeological) survey of Parcels 5-U and 7-I (project area) at the north of Tangerine Road on both sides of Rancho Vistoso Boulevard, Oro Valley, Pima County, Arizona. The project area is 31 acres and is located in Section 36, Township 11 South, Range 13 East (Figure 1). It consists of undeveloped desert crossed by multiple dirt roads and trails.

Previous Research

In 1986, the Institute for American Research (IAR) conducted fieldwork for the Rancho Vistoso archaeological survey.[1] The survey covered about 7,700 acres and documented 54 archaeological sites. Within the current project area, IAR archaeologists did not identify any archaeological sites.

2021 Survey

The IAR survey of the project area was conducted 30 years ago. The State Historic Preservation Office recommends that areas not surveyed for cultural resources within the last 10 years be resurveyed, unless an argument can be made for relying on the old survey data. Because the project area is located in a part of Rancho Vistoso known for its Hohokam prehistory and because the IAR survey was conducted prior to the use of GPS technology for mapping archaeological site locations, re-survey of the project area was deemed prudent.

Eric Petersen conducted the archaeological re-survey of the project area on October 6, 2021. He walked parallel transects spaced no more than 20 meters apart over the entire project area. A handheld GPS unit was used to record the location of archaeological findings.

No archaeological resources were identified during this re-survey.

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

E. HYDROLOGY

This section of the site analysis describes pre-development onsite hydrologic and hydraulic characteristics. Please refer to Exhibit II-E-1 and Exhibit II-E-2.

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

   The upstream watershed is approximately 30 acres and is completely developed. Most of the Horizons subdivision to the north drains into the subject property. A portion of Rancho Vistoso Blvd. drains through the site via existing stormdrains. The eastern edge of the Subject Property runs along a ridgeline forming a watershed boundary. Storm drainage from the site, upstream watershed, and existing stormdrains collect at an existing 42" SRP inlet neat the southwestern corner of the site. The 42" pipe then exits the site in a southerly direction, collecting additional drainage from the Safeway shopping center.

2. Balanced & Critical Basins

   Per Section 11.3 of the Oro Valley Drainage Criteria Manual, "all basins within the Town of Oro Valley shall be considered Critical Basins." As a result of this Critical Basin designation, the 100-year flood stormwater flows exiting the site in the proposed condition are required to match the existing condition flows or be reduced by means of detention and/or other rainwater harvesting techniques.

3. Significant Offsite Features Affecting or Affected by the Property

   Although not significant, manmade drainage structures upstream of the property include the existing stormdrains mentioned in Section II.E.1. and the existing concrete channel exiting the Horizons subdivision into the Subject Property.

4. Area of Upstream Watersheds with 100-Year Discharges Greater than 100 CFS

   None.

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

   No wells are known to exist within 100' of the site.

6. Onsite Hydrology Characteristics

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

   The channel draining into the site from the Horizons subdivision produces a Q100 of approximately 82 CFS, creating a floodplain that runs along the site's Rancho Vistoso Blvd. frontage before draining into the existing 42" SRP described above.

   ii. Areas of Sheet Flooding and Average Depths

   None onsite.

   iii. Federally mapped floodways and floodplains

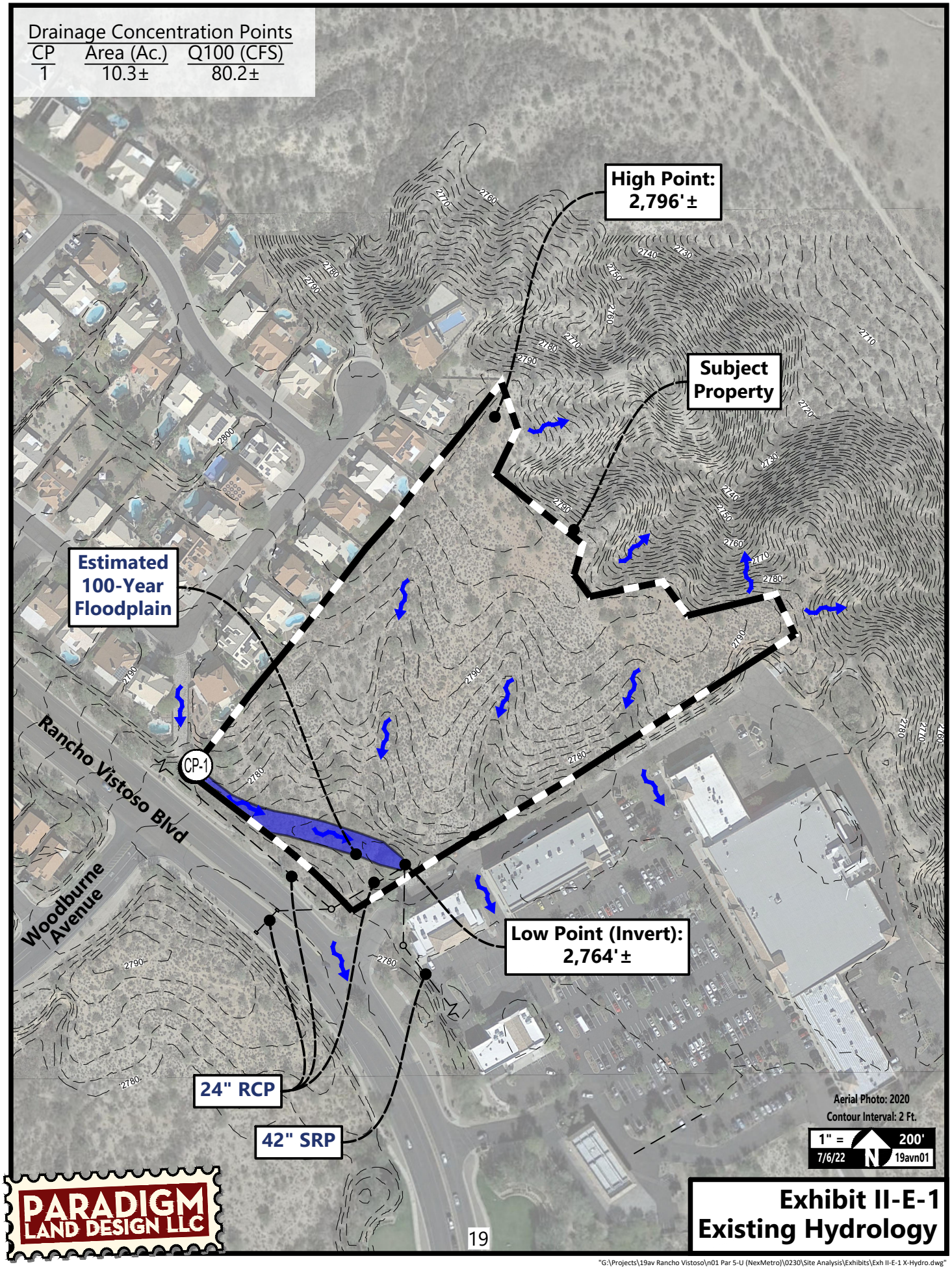
   The FEMA Flood Insurance Rate Map Panel 04019C1090L shows the entire Property to be in Zone X which indicates "areas determined to be outside the 0.2% annual chance floodplain". See Exhibit II-E-2: FEMA Map.

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

   Stormwater flows existing the site post-development will not exceed those currently exiting the site.

7. Existing Drainage Conditions along the Downstream Property Boundary

   As described above, most drainage exiting the property does so via an existing 42" SRP near the southwest corner of the site.


Drainage Concentration Points
CP | Area (Ac.) | Q100 (CFS)
1 | 10.3± | 80.2±
High Point: 2,796'±
Subject Property
Estimated 100-Year Floodplain
CP-1
Rancho Vistoso Blvd
Woodburne Avenue
Low Point (Invert): 2,764'±
24" RCP
42" SRP
Aerial Photo: 2020
Contour Interval: 2 Ft.
1" = 200'
7/6/22
N
19avn01
PARADIGM LAND DESIGN LLC
Exhibit II-E-1
Existing Hydrology
19
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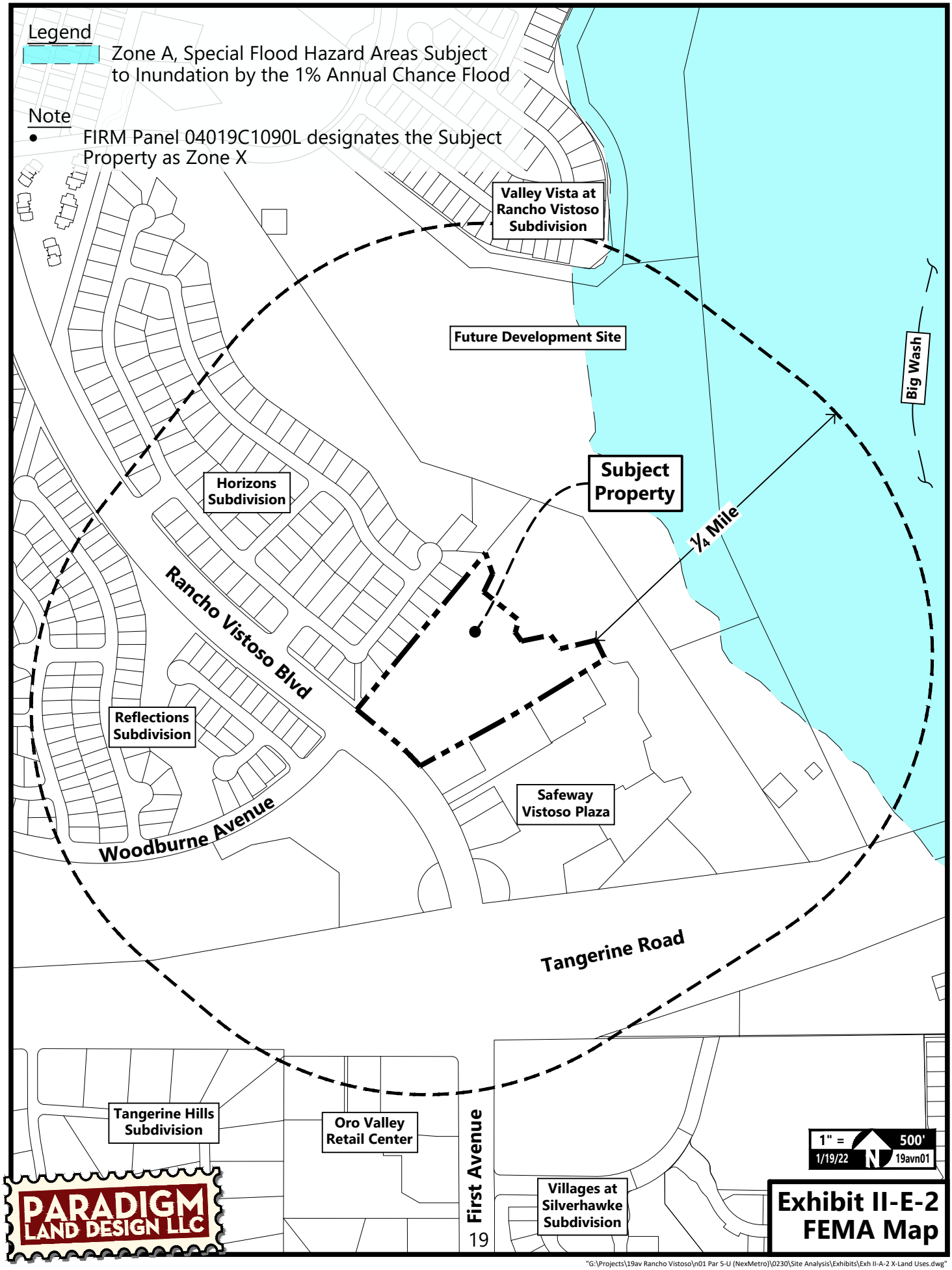

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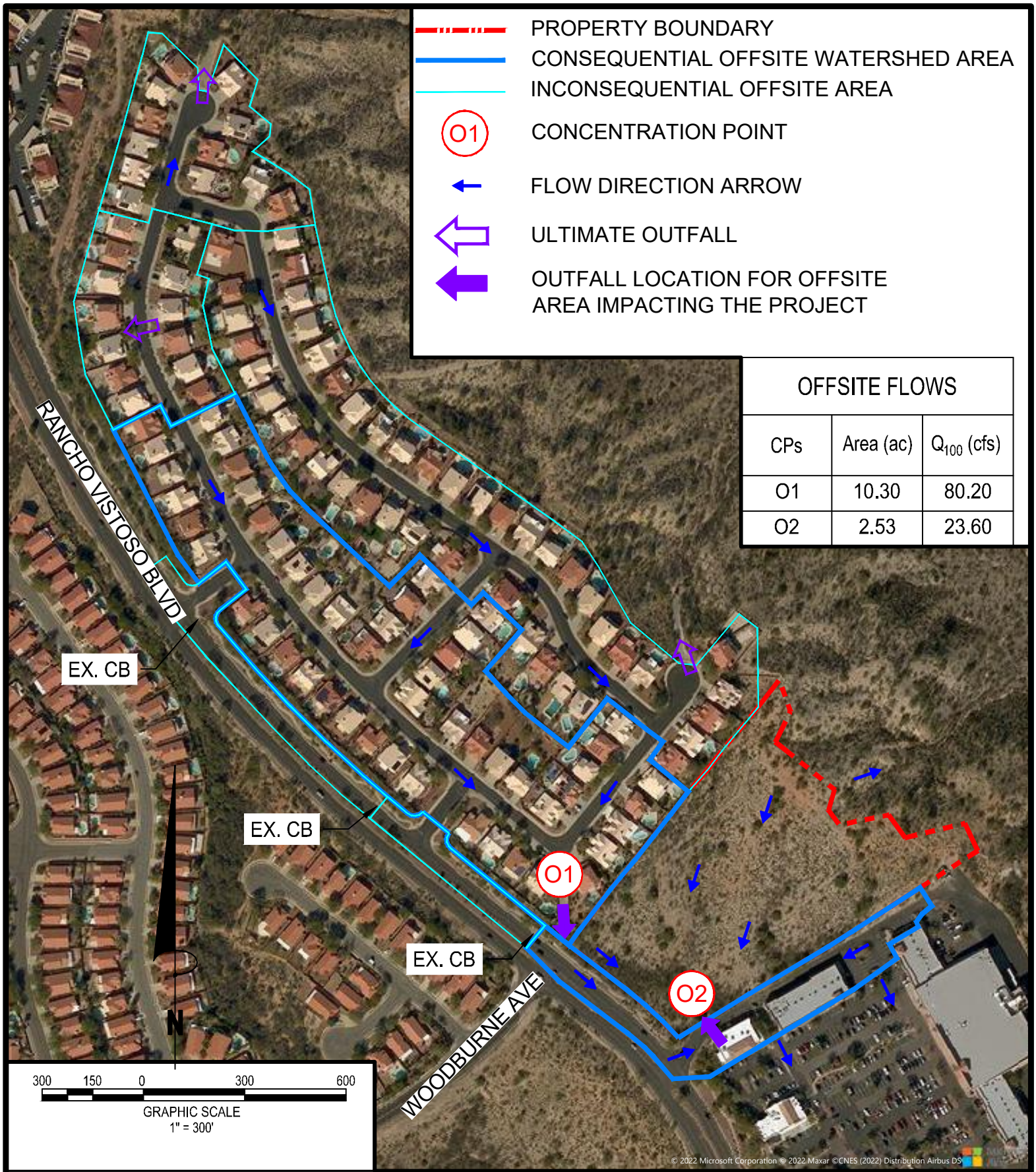

OFFSITE FLOWS		
CPs	Area (ac)	Q_{100} (cfs)
O1	10.30	80.20
O2	2.53	23.60

Bowman

7464 N. La Cholla Blvd. Tucson, Arizona 85741 Phone: (520) 463-3200
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RANCHO VISTOSO 5U
OFFSITE WATERSHED MAP

SCALE	1"=300'
DESIGN	AH
JOB No.	050954-02-001
DATE :	6/20/2022

Exhibit II-E-1 - Offsite Hydrology

V:\050954 - Cadence at Rancho Vistoso - Multifamily\050954-02-001 (ENG) - Avilla at Rancho Vistoso BFR\Engineering\Exhibits\Drainage\050954-Offsite Watershed Map.dwg 06/20/2022

F. VEGETATION

1. Onsite Vegetative Communities

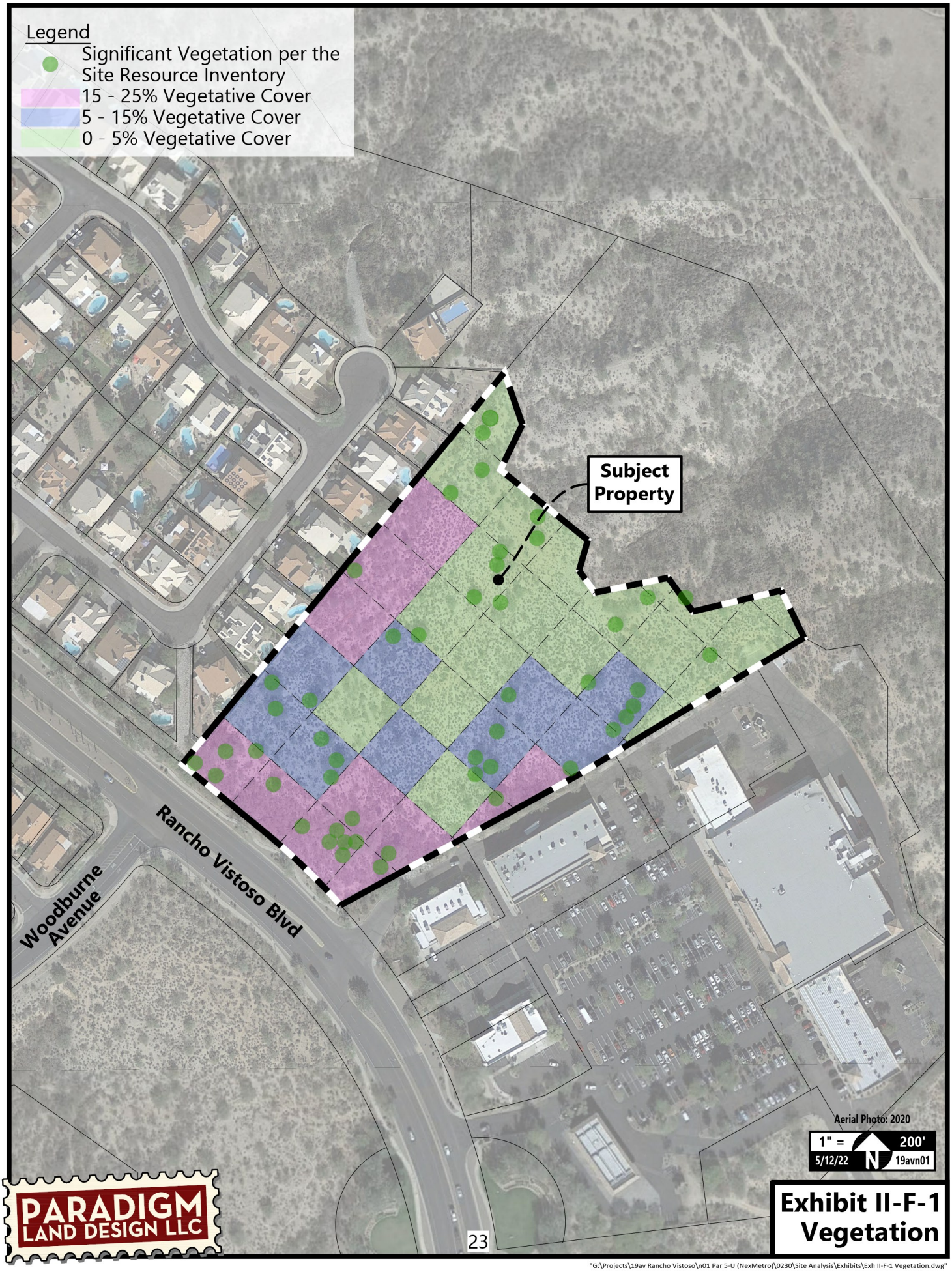
   The vegetation community on the property is typical of the Sonoran Desertscrub Paloverde-Mixed Cacti, which includes Palo Verde, Mesquite, Cholla, Prickly Pear, and Barrel Cactus.

2. Significant, Threatened, or Endangered Flora

   No threatened or endangered flora are known to exist onsite. Individual plants meeting Oro Valley's definition of "significant" are shown on the site resource inventory. See Appendix A: Site Resource Inventory.

3. Vegetative Densities

   Vegetative density of the Property is approximately 25% plant cover. See Exhibit II-F-1: Vegetation.



PARADIGM LAND DESIGN LLC

Exhibit II-F-1 Vegetation

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G. WILDLIFE

The Arizona Game and Fish Department's online review tool has been consulted, and the Environmental Review report, dated August 20, 2021, 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.

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:
Avilla Rancho Vistoso

Project Description:
Single-family residential development

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

Contact Person:
Paul Oland

Organization:
Paradigm Land Design LLC

On Behalf Of:
PIMA

Project ID:
HGIS-14482

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

Exhibit II-G-1: AZGFD Report (cont'd)

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.

Exhibit II-G-1: AZGFD Report (cont'd)

Recommendations Disclaimer:

1. 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.
2. 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
   Or
   PEP@azgfd.gov
6. 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

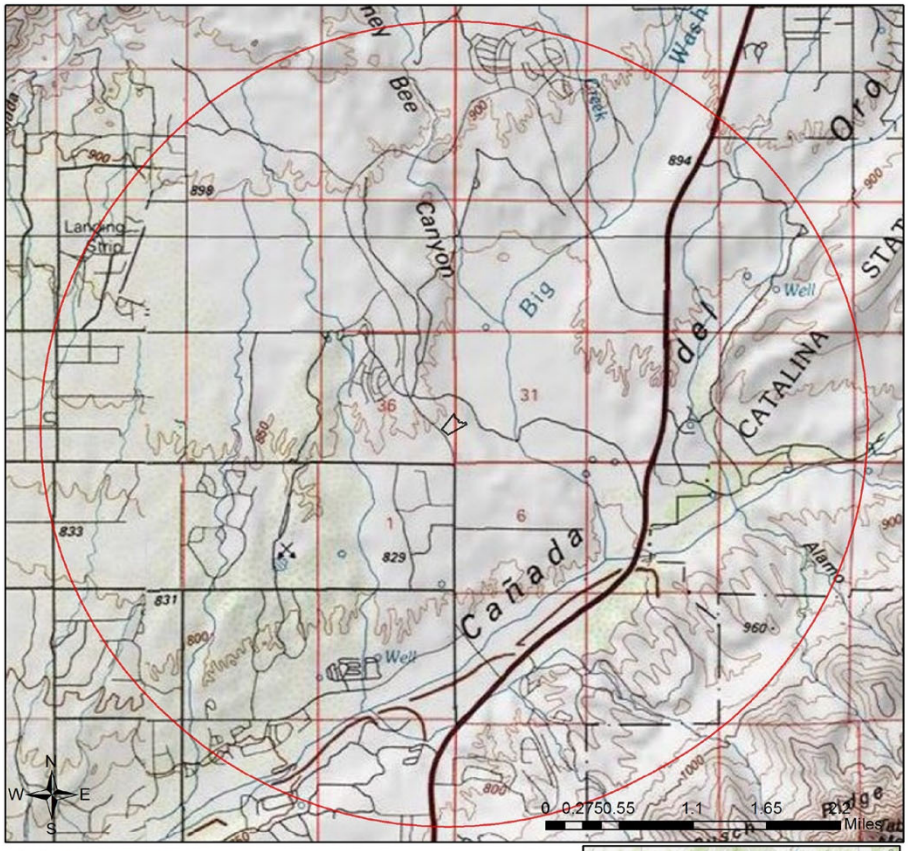
Exhibit II-G-1: AZGFD Report (cont'd)

Arizona Game and Fish Department
Project ID: HGIS-14482

project_report_avilla_rancho_vistoso_45070_46513.pdf
Review Date: 9/20/2021 10:20:15 PM

Avilla Rancho Vistoso

USA Topo Basemap With Locator Map



Project Boundary

Buffered Project Boundary

Project Size (acres): 7.96

Lat/Long (DD): 32.4277 / -110.9612

County(s): Pima

AGFD Region(s): Tucson

Township/Range(s): T11S, R13E; T11S, R14E

USGS Quad(s): ORO VALLEY

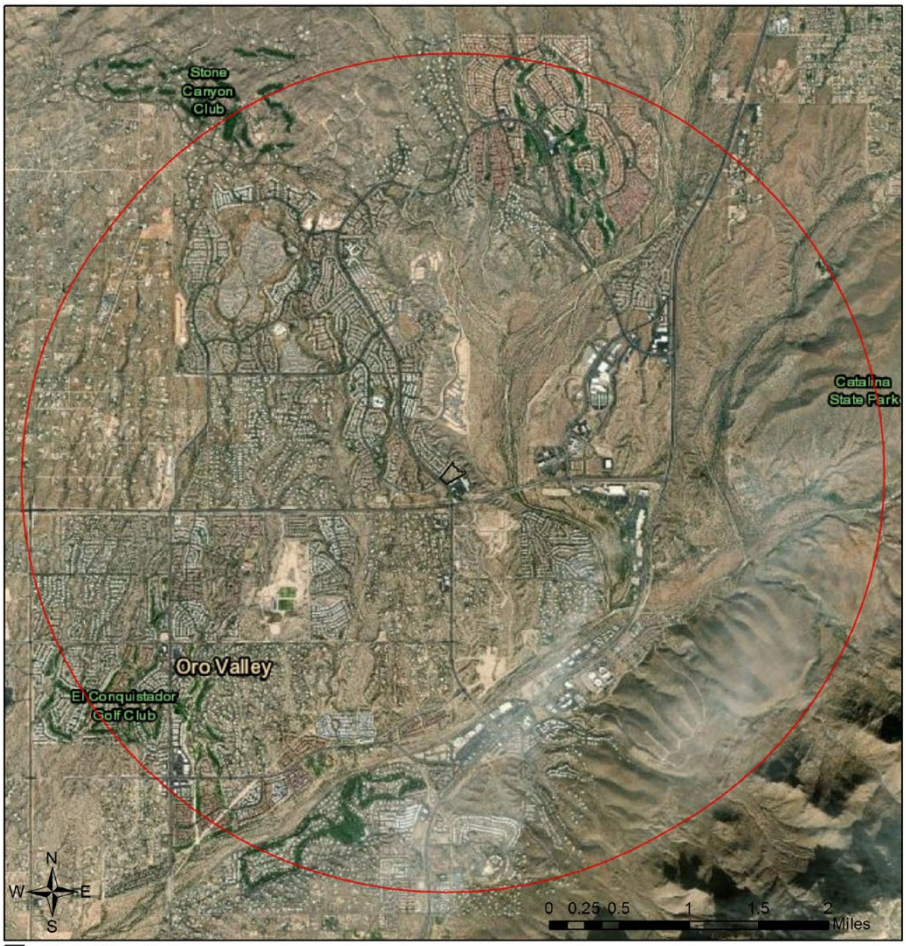
Exhibit II-G-1: AZGFD Report (cont'd)

Arizona Game and Fish Department
Project ID: HGIS-14482

project_report_avilla_rancho_vistoso_45070_46513.pdf
Review Date: 9/20/2021 10:20:15 PM

Avilla Rancho Vistoso

Web Map As Submitted By User



Project Boundary
Buffered Project Boundary

Project Size (acres): 7.96
Lat/Long (DD): 32.4277 / -110.9612
County(s): Pima
AGFD Region(s): Tucson
Township/Range(s): T11S, R13E; T11S, R14E
USGS Quad(s): ORO VALLEY

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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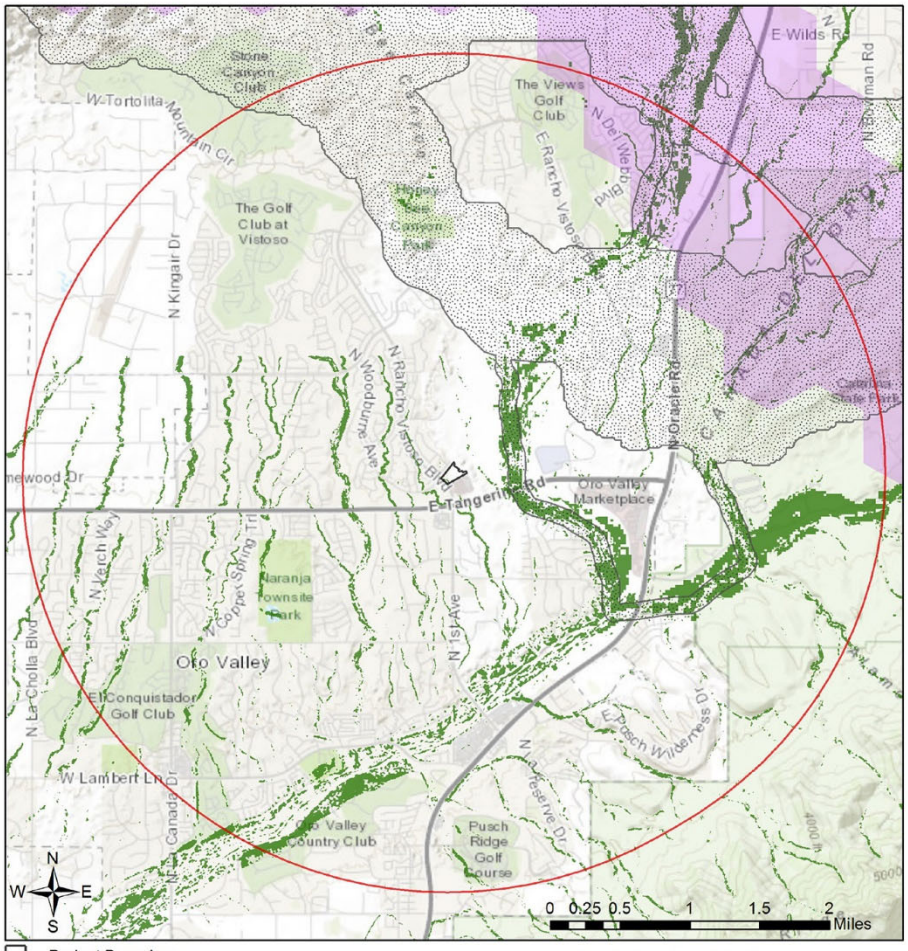
Exhibit II-G-1: AZGFD Report (cont'd)

Arizona Game and Fish Department
Project ID: HGIS-14482

project_report_avilla_rancho_vistoso_45070_46513.pdf
Review Date: 9/20/2021 10:20:15 PM

Avilla Rancho Vistoso

Important Areas



- Project Boundary
- Buffered Project Boundary
- Wildlife Connectivity
- Important Connectivity Zones
- Pinal County Riparian
- Critical Habitat
- Important Bird Areas

Project Size (acres): 7.96
Lat/Long (DD): 32.4277 / -110.9612
County(s): Pima
AGFD Region(s): Tucson
Township/Range(s): T11S, R13E; T11S, R14E
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Exhibit II-G-1: AZGFD Report (cont'd)

Arizona Game and Fish Department
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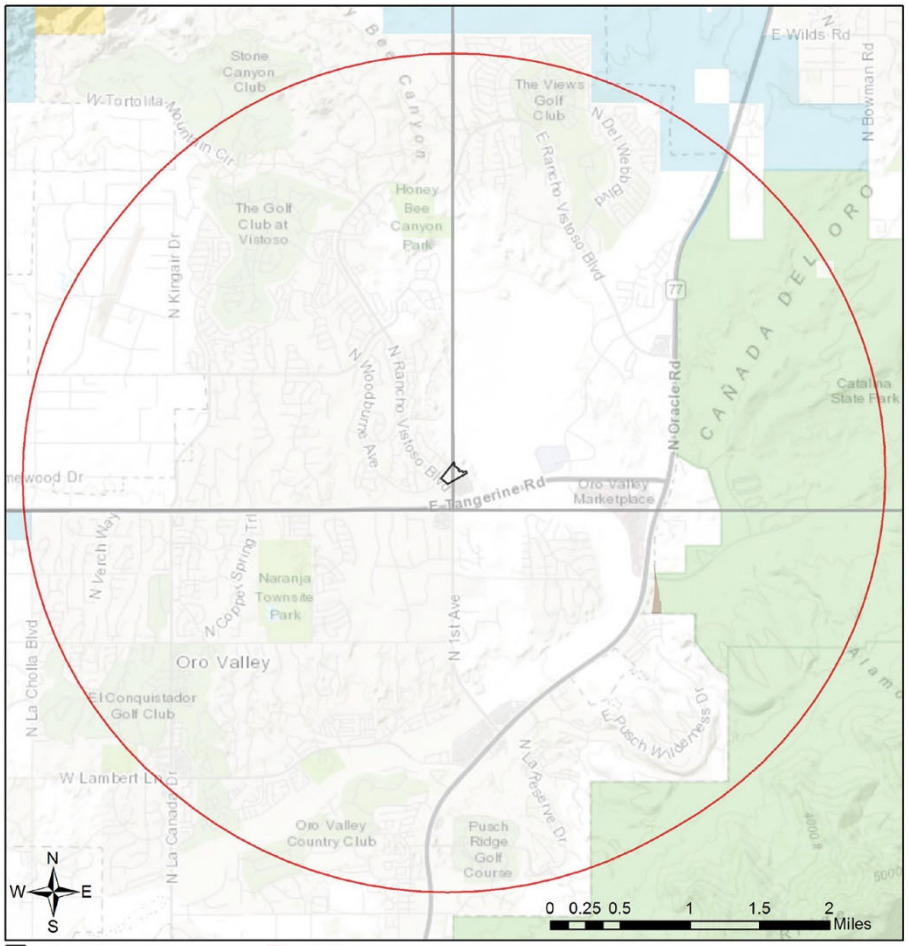
project_report_avilla_rancho_vistoso_45070_46513.pdf
Review Date: 9/20/2021 10:20:15 PM

Avilla Rancho Vistoso

Township/Ranges and Land Ownership



- Project Boundary
- Buffered Project Boundary
- Township/Ranges

Land Ownership

- AZ Game & Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
- Private
- State & Regional Parks
- State Trust
- US Forest Service
- Wildlife Area/Refuge

Project Size (acres): 7.96
Lat/Long (DD): 32.4277 / -110.9612
County(s): Pima
AGFD Region(s): Tucson
Township/Range(s): T11S, R13E; T11S, R14E
USGS Quad(s): ORO VALLEY

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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Exhibit II-G-1: AZGFD Report (cont'd)

Arizona Game and Fish Department
Project ID: HGIS-14482

project_report_avilla_rancho_vistoso_45070_46513.pdf
Review Date: 9/20/2021 10:20:15 PM

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	SC	S	S		1B
Gopherus morafkai	Sonoran Desert Tortoise	C	S	S		1A
Heloderma suspectum	Gila Monster					1A
Lepus alleni	Antelope Jackrabbit					1B
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	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 https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/
.

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
Empidonax wrightii	Gray Flycatcher					1C

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Exhibit II-G-1: AZGFD Report (cont'd)

Arizona Game and Fish Department
Project ID: HGIS-14482

project_report_avilla_rancho_vistoso_45070_46513.pdf
Review Date: 9/20/2021 10:20:15 PM

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
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	SC	S	S		1B
Gopherus morafkai	Sonoran Desert Tortoise	C	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
Thomomys umbrinus intermedius	Southern Pocket Gopher					1B

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Exhibit II-G-1: AZGFD Report (cont'd)

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
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 dependant 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.azgfd.com/wildlife/planning/wildlifeguidelines/.

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.

Exhibit II-G-1: AZGFD Report (cont'd)

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 Widlife Friendly Guidelines portion of the Wildlife Planning page at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Exhibit II-G-1: AZGFD Report (cont'd)

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.azgfd.com/wildlife/planning/wildlifeguidelines/ and https://www.azgfd.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

Exhibit II-G-1: AZGFD Report (cont'd)

Arizona Game and Fish Department
Project ID: HGIS-14482

project_report_avilla_rancho_vistoso_45070_46513.pdf
Review Date: 9/20/2021 10:20:15 PM

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 http://www.fws.gov/southwest/es/arizona/ 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
SW Forest Science Complex
2500 S. Pine Knoll Dr.
Flagstaff, AZ 86001
Phone: 928-556-2157
Fax: 928-556-2121

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

The northern, western, and southern perimeter areas are the only locations of high visibility from adjacent roadways and properties. Primary views away from the site are mainly of the Catalina Mountains and Pusch Ridge to the east and southeast. See Exhibit II-H-1: Viewsheds and Exhibit II-F-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. No significant scenic views of the Tortolita, Santa Catalina, or other mountains exist from Tangerine Road.

2. View Preservation Plan (VPP)

   A View Preservation Plan is not required because the proposed buildings will not exceed 18' in height and the project is residential in nature.

3. Core Character Vegetation (CCV)

   Not Applicable.

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Exhibit II-H-2: Viewshed Photographs

Photo Location #1: Looking Northeast across the Property at the Southwest corner of the Property

Photo Location #1: Looking Southwest away from the Property

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

Photo Location #2: Looking North at the Main Entrance into the Property

Photo Location #2: Looking South away from the Property into the Safeway Shopping Center

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

Photo Location #3: Looking North into the Property

Photo Location #3: Looking East along the Southern boundary of the Property

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

Photo Location #3: Looking South away from the Property into the Safeway Shopping Center

Photo Location #3: Looking West along the Southern Boundary of the Property

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

Photo Location #4: Looking Northwest from the Southeast Corner of the southern Portion of the Property

Photo Location #4: Looking South from the Southeast Corner of the Southern Portion of the Property, behind the Safeway Shopping Center.

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

Photo Location #5: Looking West across the Property

Photo Location #5: Looking Southeast away from the Property, towards the Catalina Mountains

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

Photo Location #6: Looking Southwest into and across the Property

Photo Location #6: Looking North from the Northeast Corner of the Property

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

Photo Location #7: Looking North from a point near the Center of the Northern Property Line

Photo Location #7: Looking South, across the Property from a point near the Center of the Northern Property Line

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

Photo Location #8: Looking Northeast from a point near the Center of the Northern Property Line

Photo Location #8: Looking Southwest, across the Property from a point near the Center of the Northern Property Line

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

Photo Location #9: Looking East into the Northern Portion of the Property

Photo Location #9: Looking Southeast along the Western Property Line

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

Photo Location #10: Looking North from the middle of the Western Property Line

Photo Location #10: Looking East, across the site from the middle of the Western Property Line

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

Photo Location #10: Looking South from the middle of the Western Property Line

Photo Location #10: Looking West, away from the Property and across Rancho Vistoso Blvd. from the middle of the Western Property Line

I. TRAFFIC

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

None. The primary entry to the site will come from the existing access drive in the northwestern corner of the Safeway Shopping Center. Originally planned to serve both properties, this access drive will require slight modification to make it aesthetically appropriate for a residential use as well as the shopping center.

2. Arterial Streets within One Mile of the Site

All the traffic generated by this project will be accommodated by Rancho Vistoso Blvd, Tangerine Road, First Avenue, and Moore Road. See Exhibit: II-G-1 Major Roads. An analysis of capacity (the "Avilla Rancho Vistoso East and West Traffic Impact Analysis") by CivTech, dated June 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.

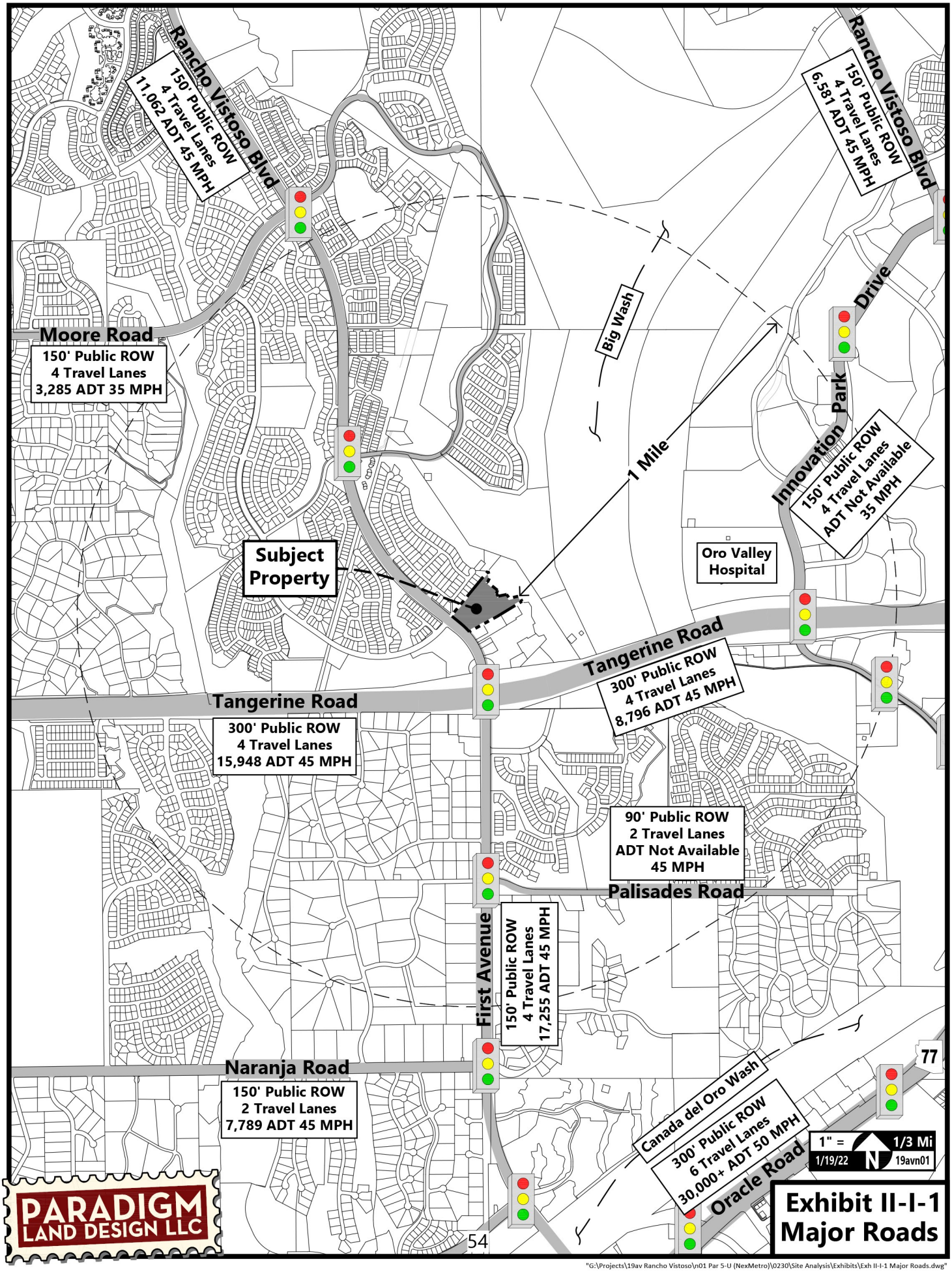
Roadway Name	Existing R.O.W.	Ultimate R.O.W.	Travel Lanes	Capacity	Theo. Design Speed	ADT (PAG)	Condition	Scheduled Improvements
Rancho Vistoso Blvd. (Public)	150′	150′ Continuous	4	40,000	55	11,062	Paved	None Scheduled
Tangerine Road (Public)	300′	300′ Continuous	4	40,000	55	15,948	Paved	None Scheduled
First Ave. (Public)	150′	150′ Continuous	4	40,000	55	17,255	Paved	None Scheduled
Moore Road (Public)	150′	150′ Jogged	4	25,000	45	3,285	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 Rancho Vistoso Blvd. / First Avenue & Tangerine Road, Rancho Vistoso Blvd. & Moore Road, Tangerine Road & Innovation Park Drive, First Avenue & Palisades Road, and First Avenue & Naranja Road. The existing intersection of Rancho Vistoso Blvd. and the northern Safeway shopping center access drive will be signalized.

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 bike line that extends the entire length of Rancho Vistoso Boulevard from Tangerine Road to Oracle Road. On street bike lanes and paved multi-use paths also exist the entire length of Tangerine Road and First Avenue. These routes provide connectivity to Painted Sky Elementary School, Copper Creek Elementary School, Honey Bee Park, the Woodshade Linear Park, Sunset Park, Hohokam Park and the greater Oro Valley / Pima County bicycle-pedestrian path system. See Exhibit II-G-2: Bike Routes.



PARADIGM LAND DESIGN LLC

Exhibit II-I-1 Major Roads

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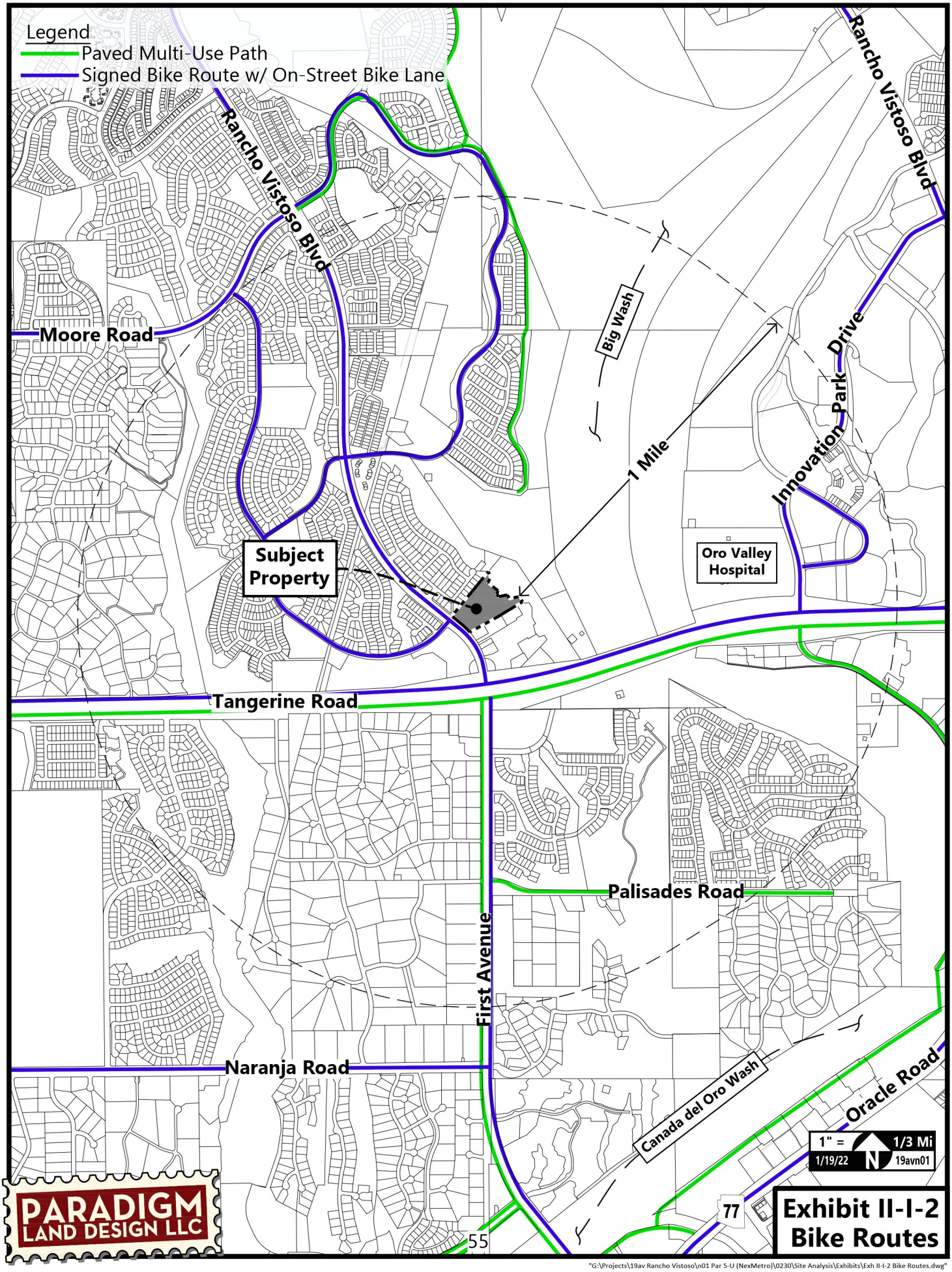

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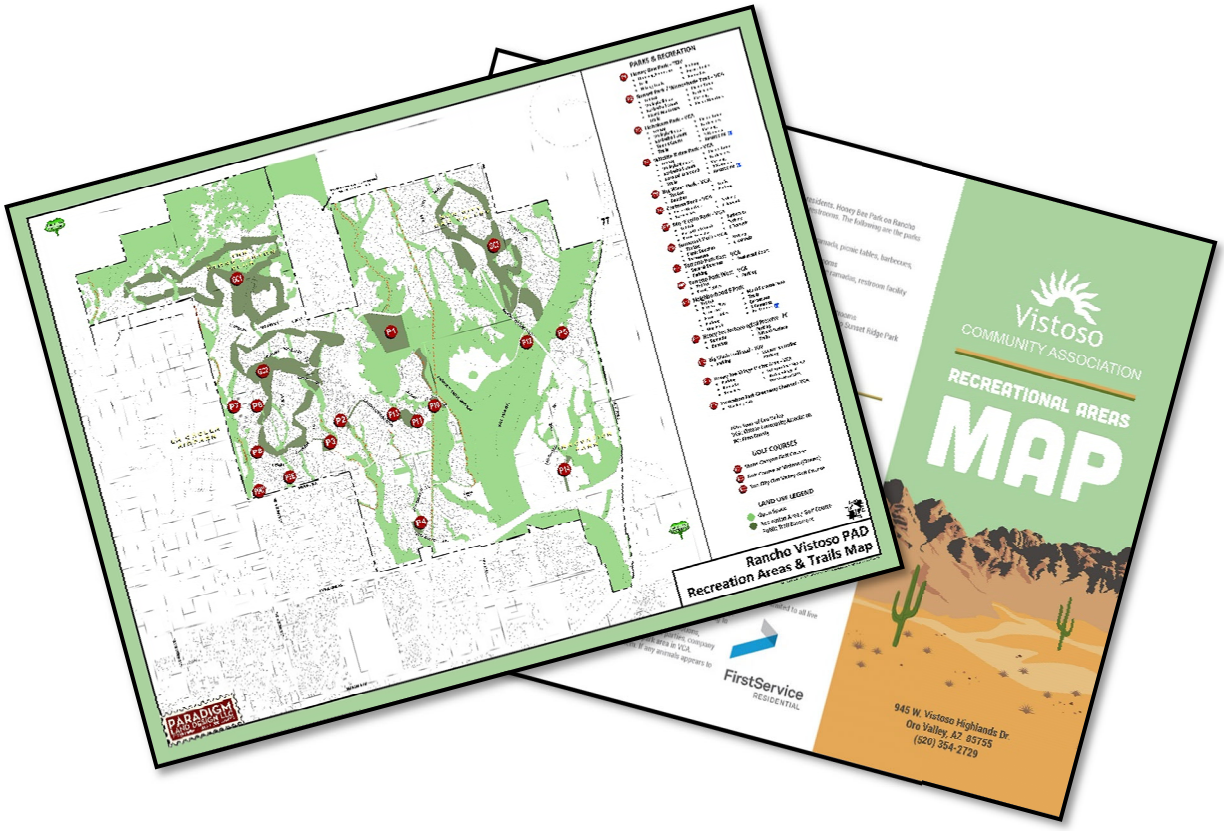
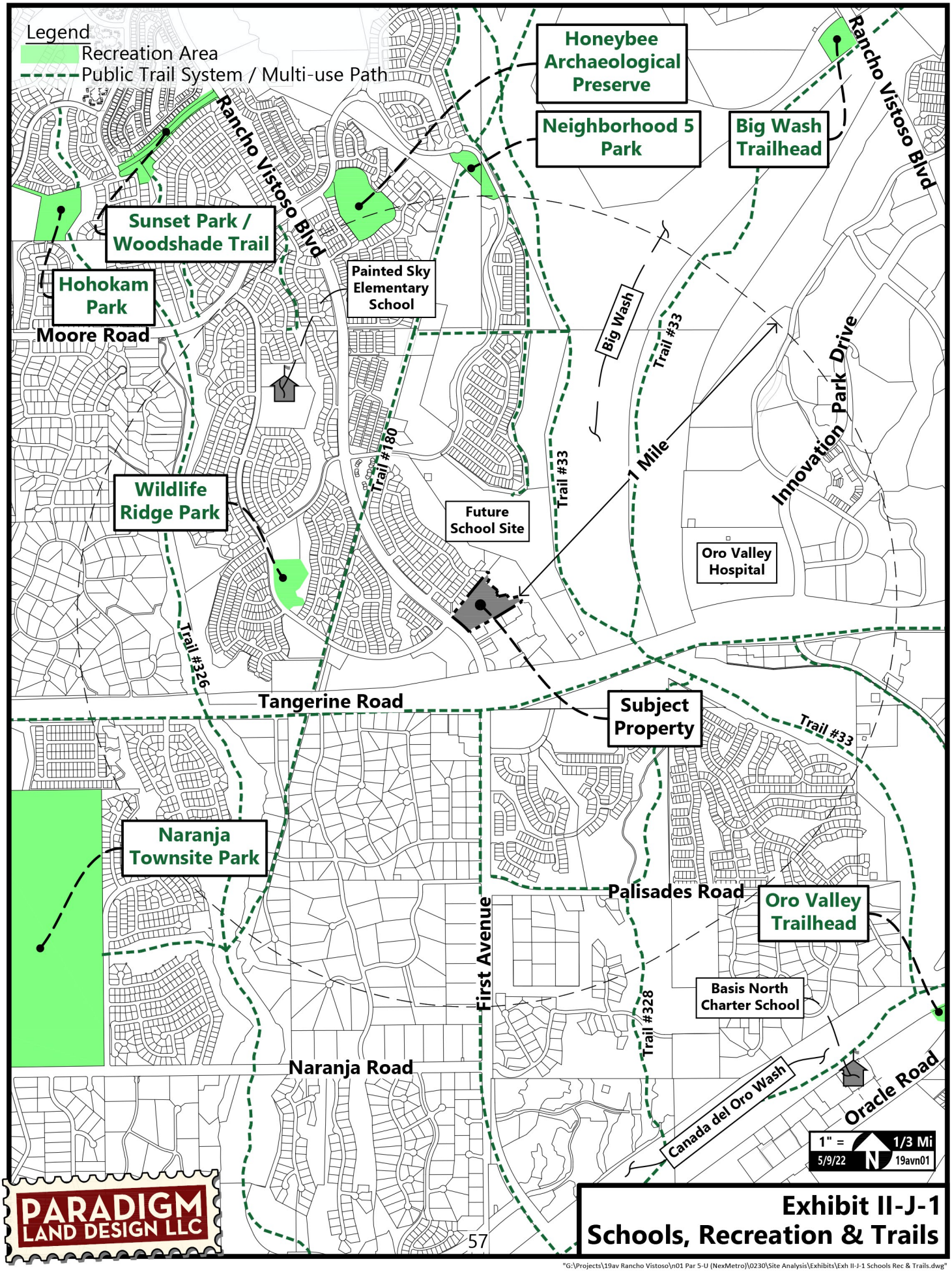
J. PARKS, RECREATION AREAS, AND TRAILS

There are numerous trails and neighborhood parks within the Rancho Vistoso PAD, including some within one mile of the subject property. Wildlife Ridge Park is approximately one-half mile west of the subject property. The Honeybee Archaeological Preserve and the Neighborhood 5 Park are both one mile north of the property. The Sunset Park / Woodshade Trail and Hohokam Park are a mile and half 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
Neighborhood 5 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





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K. SCHOOLS

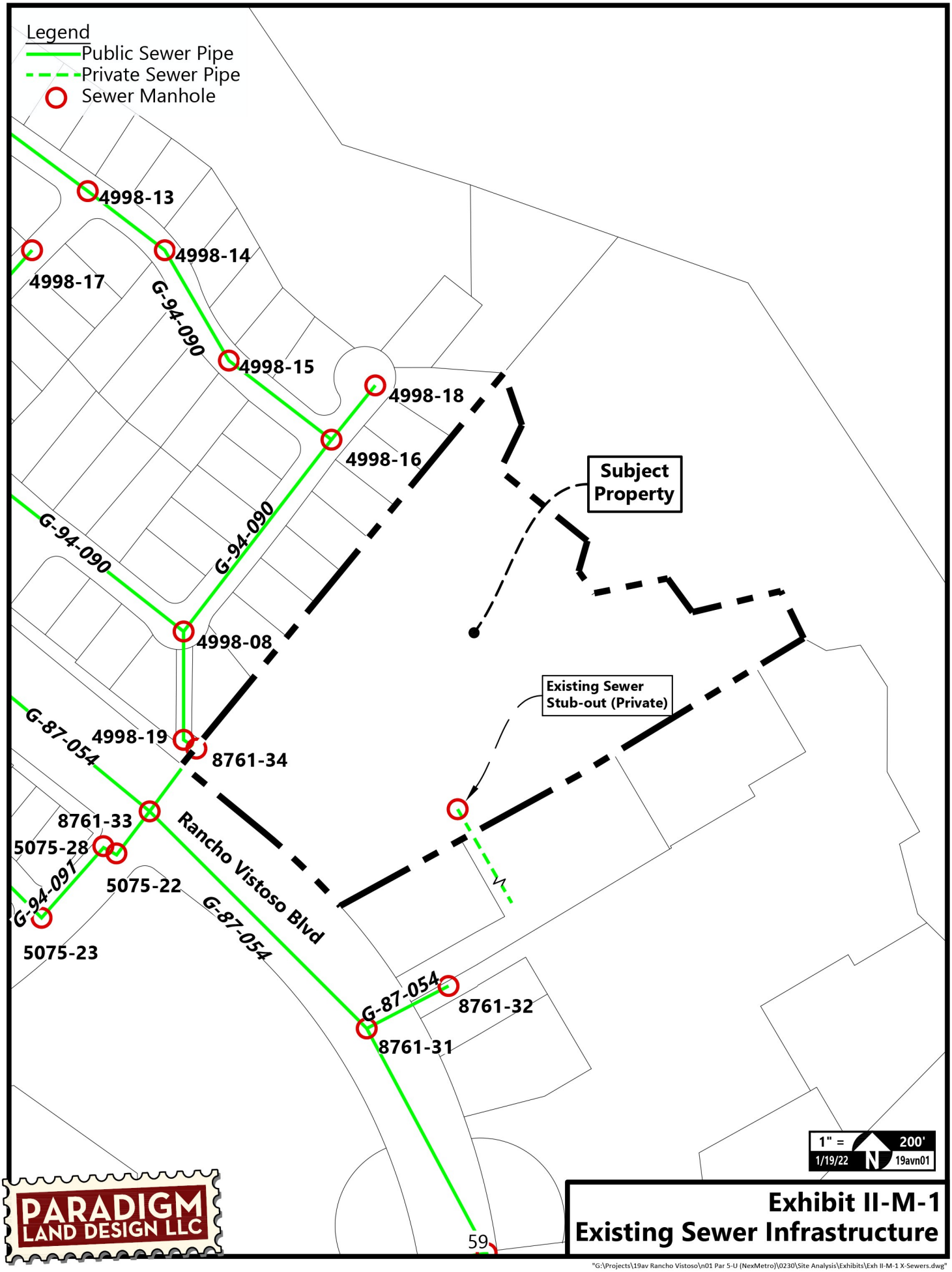
Students within this development will attend the schools in the Amphitheater Unified School District. The only school within one mile of the site is the Painted Sky Elementary School. It is approximately three-quarter of a mile to the northwest and has capacity for this development. Future students may also attend Coronado K-8 and Ironwood Ridge High School, which also have capacity for this development. The charter school Basis North is approximately a mile and half to the southeast but is not part of the Amphitheater Unified School District. See Exhibit: II-H-1: Schools, Recreation & Trails.

L. WATER SERVICE

The Property will be served by the Oro Valley Water Utility. Contact information: (520) 229-5000 / 11000 N. La Canada Dr. The exact nature of offsite improvements will be determined during the platting process, although none are anticipated. An 8" water line exists within the Rancho Vistoso Blvd. right-of-way and an 8" water line also stubs-out into the site from the Safeway shopping center. See Exhibit II-M-1: Existing .

M. SEWER SERVICE

A 12" sewer line exists within the Rancho Vistoso Blvd. right-of-way. Additionally, an 8" sewer line stubs-out into the site from the Safeway shopping center to the south. Capacity is currently available for this project in the public sewer G-87-054, downstream from manhole 8761-33. See Exhibit II-M-1: Existing Infrastructure.


Legend
Public Sewer Pipe
Private Sewer Pipe
Sewer Manhole
4998-13
4998-14
4998-17
G-94-090
4998-15
4998-18
4998-16
Subject Property
G-94-090
G-94-090
4998-08
Existing Sewer Stub-out (Private)
G-87-054
4998-19
8761-34
8761-33
5075-28
Rancho Vistoso Blvd
5075-22
G-94-091
G-87-054
5075-23
G-87-054
8761-32
8761-31
59
1" = 200'
1/19/22
N
19avn01
PARADIGM LAND DESIGN LLC
Exhibit II-M-1
Existing Sewer Infrastructure
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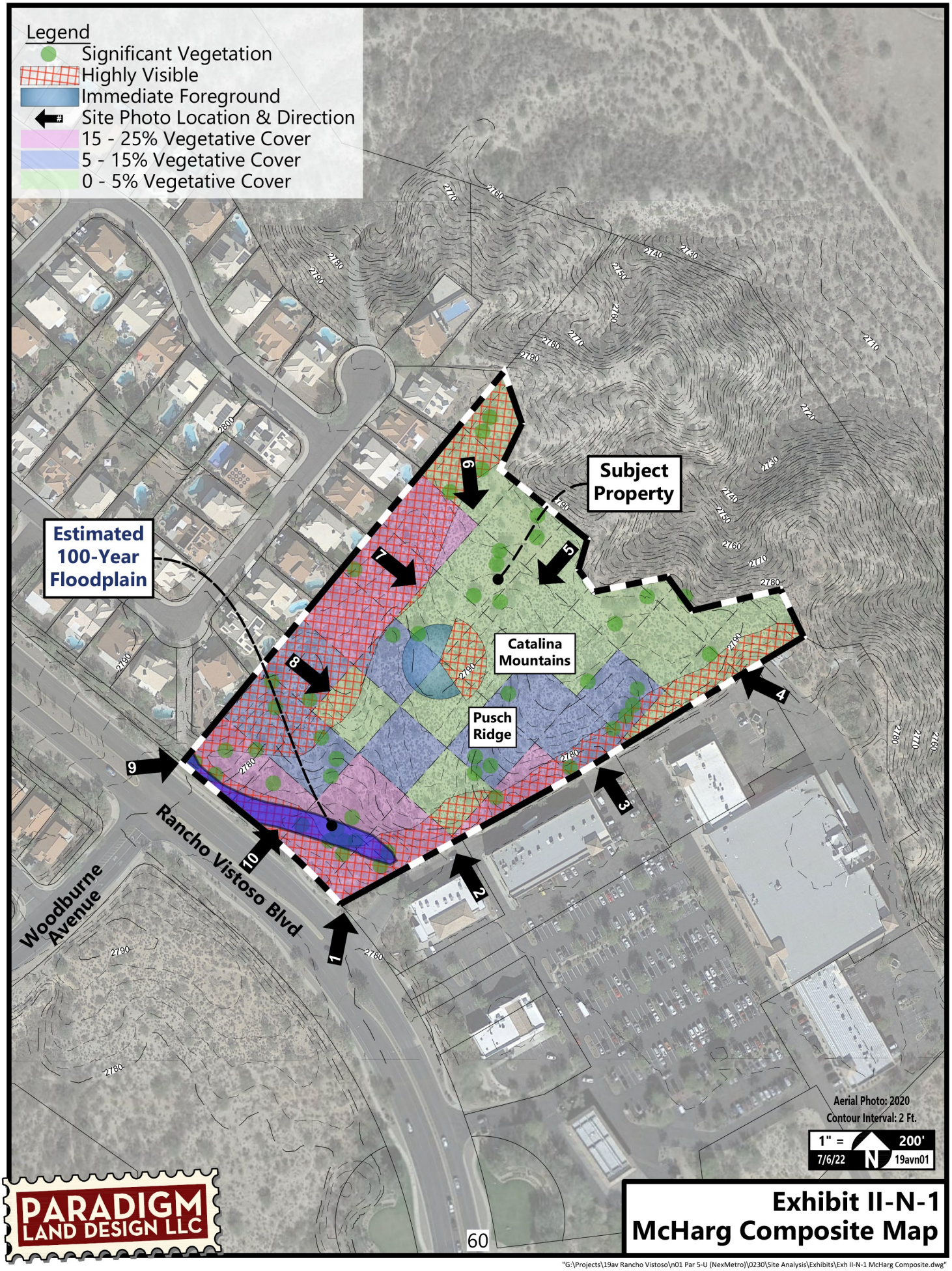

PARADIGM LAND DESIGN LLC

Exhibit II-N-1
McHarg Composite Map

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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 Zoning Code. As evidenced by the site plan, this proposed rezoning has been crafted after careful and responsive consideration of the Property's context.

A. PROJECT OVERVIEW

1. Project Description

NexMetro proposes to rezone the subject property (8.0± ac.) from C-1 Commercial in the Rancho Vistoso PAD to High-Density Residential (HDR) in the PAD. Two small slivers of PAD Open Space along the eastern property boundary are planned to be retained as open space. This will allow for the development of the eastern portion of Avilla Rancho Vistoso, a neighborhood of single-family rental casitas just north and east of the Safeway shopping center. The eastern portion of Avilla Rancho Vistoso will contain approximately 87, 1-story, predominately detached residences that will provide an appropriate transition between the existing commercial center to the south and the existing residential development to the north. The proposed residences within the project will be a mix of one, two, and three bedrooms. The residences will have a maximum height of 18' and will range in square footage between approximately 690 sq.ft. to 1,265 sq.ft. They will be grouped around landscaped pedestrian corridors and a community recreation area will include a pool, outdoor kitchen, green space, shaded seating areas, and a small dog park. See Exhibit III-A-1: Tentative Development Plan.

2. General Plan Conformance

Avilla Rancho Vistoso has a current land use designation of Neighborhood Commercial / Office and is within a Tier 2 growth area. The Oro Valley General Plan 'Your Voice, Our Future' allows HDR as a comparable zone to R-6 in the Neighborhood Commercial / Office land use designation. See Exhibit III-A-2: Existing General Plan

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.

Plan Summary

1. Property Area: 8.0± Ac.
2. Existing Zoning: PAD C-1 (Community Commercial)
3. Existing General Plan: Neighborhood Commercial / Office
4. Proposed Zoning: PAD HDR (High Density Residential)
5. Proposed Units: 87 (A mix of 1-, 2-, and 3-Bedrooms)
6. Proposed Bldg. Height: 18' Single-Story
7. Proposed Open Space: 30% per Rancho Vistoso PAD
8. Recreation Area: Per OVZCR Requirements

MULTI-FAMILY UNITS AND PARKING

	NUMBER OF UNITS	MIX %	PARKING REQUIRED PER UNIT	TOTAL PARKING REQUIRED
1 BEDROOM	36	41%	1.5	54
2 BEDROOM	36	41%	1.75	63
3 BEDROOM	15	17%	2.0	30
TOTALS	87	100%		147
			VISITOR PARKING (1/4)	22
			TOTAL PARKING REQUIRED	169
			TOTAL PARKING PROVIDED	171
			HANDICAP SPACES PROVIDED	6
NOTE: TOTAL PARKING PROVIDED INCLUDES GARAGES				

Exhibit III-A-1
Tentative Development Plan

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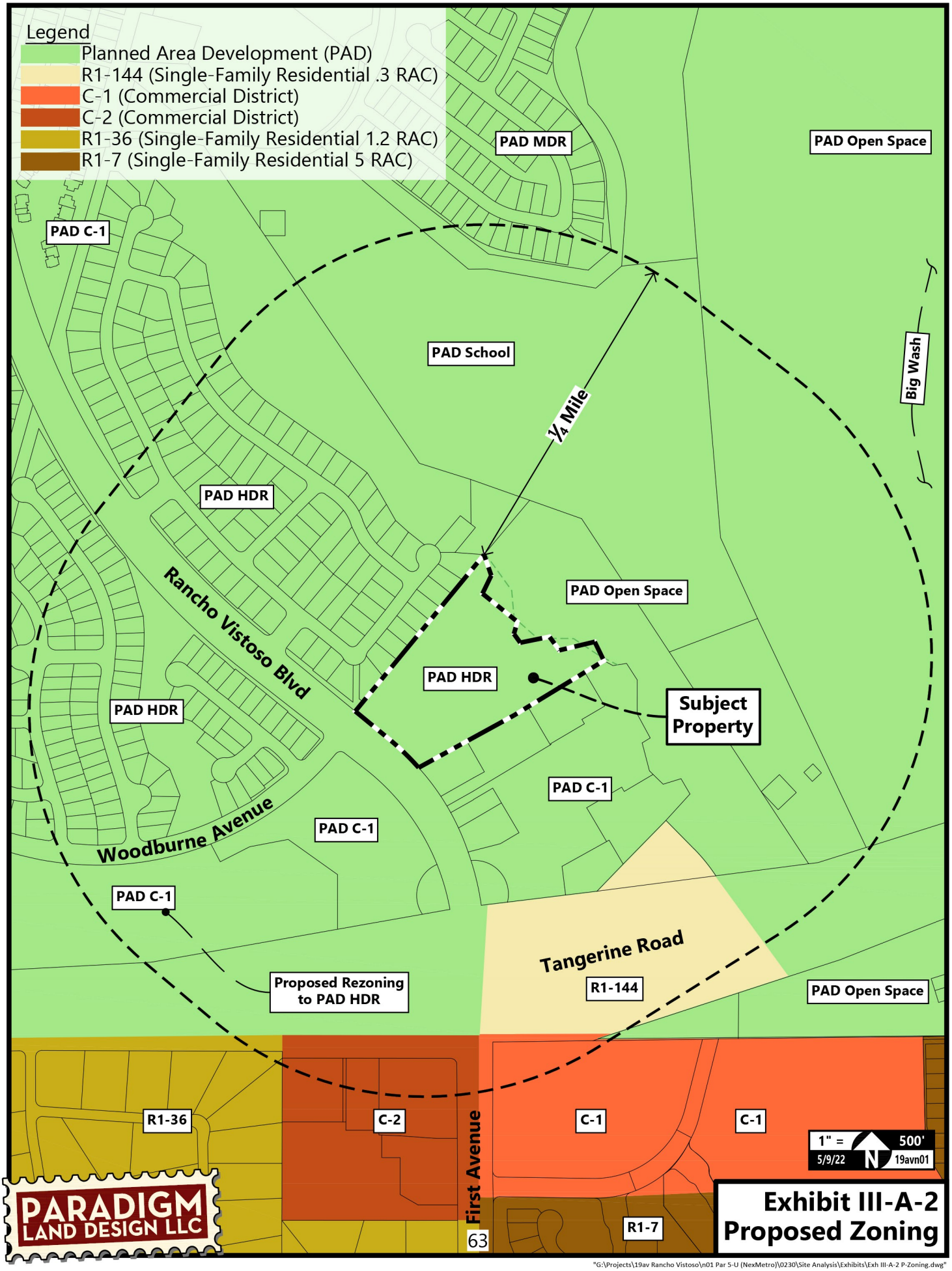

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ACTIVITY LAWN

10' LANDSCAPE BUFFER

OPEN SPACE ZONING BOUNDARY

10' LANDSCAPE BUFFER

DOG PARK

OVERLOOK PICNIC AREA

ENHANCED AMENITY: SWIMMING POOL, JACUZZI, FIRE PIT, OUTDOOR KITCHEN

RANCHO VISTOSO BLDV

N

40 20 0 40 80

GRAPHIC SCALE
1" = 40'

LEGEND

TOTAL OPEN SPACE:
REQUIRED = 2.42 AC. (30% OF 8.05-AC. SITE)
PROVIDED = 2.42 AC.

RECREATION AREA:
REQUIRED = 1.02 AC. (1 AC. PER 85 UNITS)
PROVIDED = 0.83 AC. (SEE ENHANCED RECREATION AREA CREDIT CALC.)

Bowman

Bowman Consulting Group Ltd
6751 North Sunset Blvd
Suite 325
Glendale, Arizona 85305
Phone: (480) 629-8830
www.bowman.com

OPEN SPACE ANALYSIS

AVILLA RANCHO VISTOSO
EASTERN PORTION

ORO VALLEY, AZ

PIMA COUNTY

FS21-289
PROJECT NUMBER

PLAN STATUS

DATE	DESCRIPTION

DB	MB	DMF
DESIGN	DRAWN	CHKD

SCALE H:
V:

JOB No. 050954-02-001

DATE : 6/17/2022

SHEET 1 OF 1

B. EFFECT ON EXISTING LAND USES

Since the subject property is currently vacant, there will be no negative impact to existing land uses. Developing this property as single-family rental homes will provide an appropriate density transition between the existing commercial center to the south and the existing homes to the north. Avilla Rancho Vistoso will be much more compatible with the existing homes to the north than would a commercial development. The transitional density of this project will help support the many commercial businesses not only located immediately south of the property but also with greater Oro Valley.

C. ENVIRONMENTALLY SENSITIVE LANDS

ESL and ESOS do not apply to this site because it is in Rancho Vistoso. 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

   Due to the lack of regulated slopes and other challenging topographic constraints, the development of this property can proceed without special grading considerations. The site will be mass graded so improvements within this project can be located at or near existing grade, subject to drainage requirements. As vehicular access is to be gained from the south, the elevation of the site will generally need to be lowered to keep the entry drives from being very steep. Along the Horizons subdivision to the north a sloped and/or terraced landscape bufferyard will be employed to make up the elevation differences.

2. Slope Encroachment

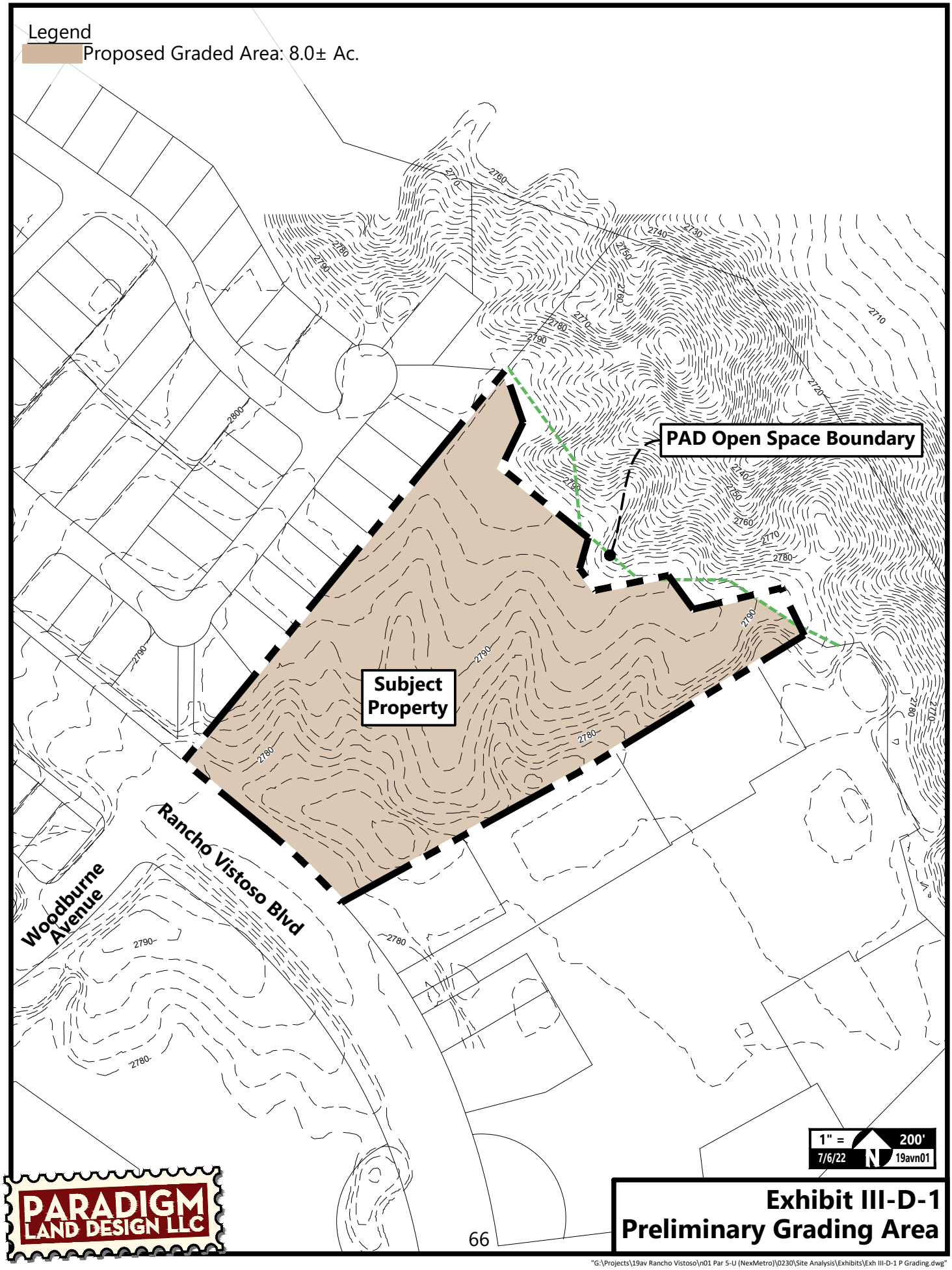
   The subject property does not contain any regulated 15% or greater slopes, and as such there are no areas of encroachment.

3. Hillside Conservation Areas

   There are no Hillside Conservation Areas on the subject property. The steep slopes just to the northeast of the property will be left in their natural condition and will not be disturbed.

4. Quantified Site Disturbance

   Because of the nature of this project, all areas located outside of the designated Open Space will be graded to allow for the construction of this development.



PARADIGM LAND DESIGN LLC

Exhibit III-D-1
Preliminary Grading Area

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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 intensively 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. A recent site survey conducted in October 2021 found that there were no archaeological resources on the property. 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.

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. See Exhibit III-F-1: Post-Development Hydrology.

2. Modification of Drainage Patterns

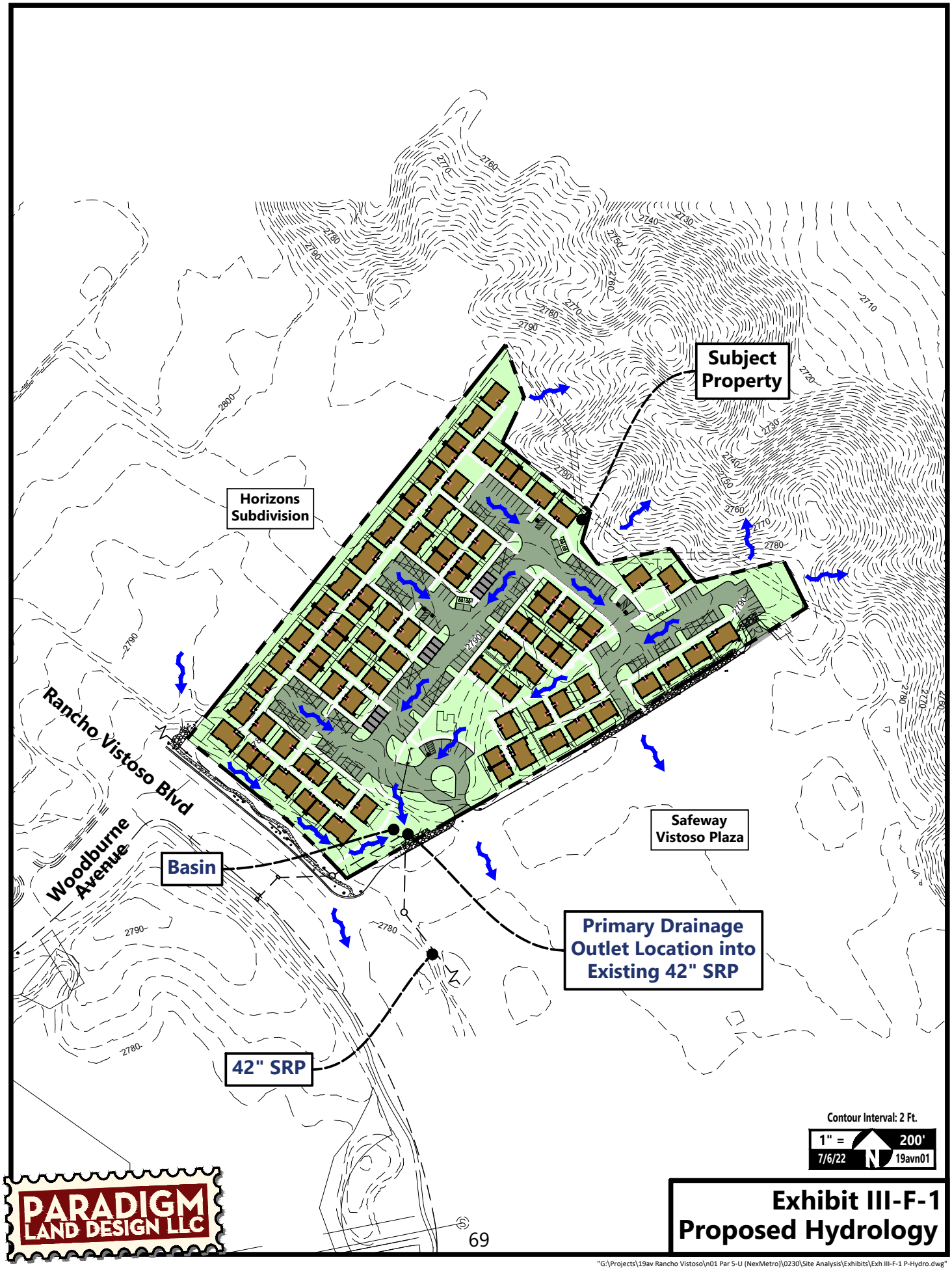
   The site has no sub-basins with discharges greater than 50 cfs and is free of any federally mapped floodplains. Offsite flows from upstream watersheds will be collected in detention basins, channels and/or culverts directing the runoff through the project site.

3. Mitigation

   Drainage design within the proposed development will convey offsite and onsite flows using constructed channels, storm drainpipes, onsite detention basins in accordance with the Town of Oro Valley Floodplain Management Code and the Drainage Criteria Manual. Channel and basin geometry and construction will follow accepted standards regarding erosion and flow velocity control. Horizontal elements constructed within the project will be set at or near existing grade to minimize impacts to existing drainage patterns. All building pads will be designed to be a minimum of 1 foot above the established 100-year flood elevations. The site will be graded according to Town standards, which will provide adequate room and grades to handle stormwater runoff.

4. Town Policy

   The post-developed 100-year discharges exiting the site will be maintained in their current condition or reduced by a maximum of 10% in accordance with Town policy. Which requires all development to conform to "critical basin" requirements and not result in any adverse impacts for adjacent or downstream property owners.



PARADIGM LAND DESIGN LLC

Exhibit III-F-1
Proposed Hydrology

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G. VEGETATION

There are several trees onsite that meet the Town's definition of significant vegetation. Existing native vegetation has been inventoried, and viable specimens will be transplanted per the Town's native plant preservation ordinance to various areas onsite. Vegetation that meets transplant requirements have been shown on the Site Resource Inventory. 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. Open space is primarily located in the recreation area and in the drainage-related open spaces throughout the development. 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 sandwiched between existing developments, this property does not have any wildlife corridors that traverse the site. Major wildlife corridors exist within the Big Wash which is just east of the subject property. These corridors allow for uninterrupted wildlife movement throughout the greater Oro Valley area.

I. VIEWSHEDS

1. Design Response to Site Viewsheds

   This proposed residential development will consist of all one-story homes and will restrict building heights to a maximum of 18 feet. Impacts to viewsheds of neighboring developments will be minimal, and certainly less than the potential impacts of 3-story, 34-foot commercial buildings as permitted by the property's existing zoning. Bufferyards will be provided around the perimeter of the property to help mitigate views into the site. Necessary roadway construction will generally follow the natural terrain to minimize the resulting grading limits. All disturbed areas not receiving built improvements will be landscaped.

2. ORSCOD / TRCOD Conformance

   The subject property does not fall within the Oracle Road Scenic Corridor Overlay District. It is within the Tangerine Road Corridor Overlay District but because the property does not front on Tangerine Road and is set back a significant distance, a viewshed analysis is not required.

   The architectural design of these rental homes will be consistent with surrounding residential developments and will adhere to the Rancho Vistoso PAD's design guidelines. 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 primary entry to the community will be via the existing access drive in the northwestern corner of the Safeway shopping center. Originally planned to serve both properties, this access drive will require slight modification to make it aesthetically appropriate for a residential use as well as the shopping center. A secondary access point is proposed along the southern property line, connecting to an existing parking access lane within the Safeway shopping center. Finally, an emergency access gate will be located near the southeast corner of the property, tying into the existing roadway stub-out leading north from the shopping center.

ii. Offsite Road Improvements

The roadways adjacent to and within a one-mile distance from the subject property are in good condition. A proposed loop road will connect Tangerine Road to Rancho Vistoso Blvd. through the western portion of the Avilla project and will align with existing median breaks in both roadways. A new traffic signal will be installed at the loop road's intersection with Rancho Vistoso Boulevard, which is at the northern Safeway access drive. The existing access drive in the northwestern corner of the Safeway shopping center will require slight modification to accommodate this proposed development. Coordination for these necessary improvements will take place with the adjacent property owner. Installation of a northbound right-turn lane at that same intersection is technically warranted, but would be out of character for the area as no other right-turn lanes exist along Rancho Vistoso Blvd. Woodburne Avenue will be realigned to intersect with the proposed loop road, which will provide existing and future residents with safer and more convenient access to Rancho Vistoso Blvd. and Tangerine Road. Required offsite improvements will be completed concurrently with the development of the project.

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

With an average daily trip (ADT) of approximately 7 trips per rental, the 87 rental homes proposed will generate approximately 632 ADT. The private access lanes inside this development and the abutting arterial roadways, which are operating below capacity, will be able to accommodate traffic generated from this project. Once the traffic signal is installed at the northern Safeway entrance's intersection with Rancho Vistoso Boulevard that intersection is modelled to function at a high level of service.

iv. Impact to Existing Development Abutting Offsite Streets

Rezoning the subject property from Community Commercial (C-1) to High Density Residential (HDR) will reduce the traffic impact to surrounding developments and off-site streets, compared to a scenario in which the site was to be developed according to its existing commercial entitlements.

v. Capacity Analyses for Proposed Internal & Offsite Streets.

All three roadways discussed below are public, 4-lane divided boulevards with capacities of approximately35,000 – 40,000 ADT.

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.

Woodburne Avenue

Woodburne Avenue is a two-lane (one in each direction) paved collector road with a posted speed limit of 35 mph. The existing and ultimate right-of-way is 80 feet, which is continuous. The Pima Association of Governments (PAG) does not provide traffic volumes for this roadway.

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

Rancho Vistoso Blvd, Tangerine Road, and First Avenue are all in good condition and will not require any improvements to accommodate this development. A signal will be installed at the intersection of Rancho Vistoso Blvd. and the northern Safeway entrance.

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

The developer will construct the required offsite improvements.

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

The proposed ingress/egress point into this project will come from the existing access lane in the northwest corner of the Safeway shopping center. No additional access points are being proposed onto Rancho Vistoso Blvd. Vegetation adjacent to the projects main ingress/egress point will be maintained to provide safe site visibility for vehicles exiting the site and will allow safe turning movements to and from the site. The proposed internal access drives will meet the Town of Oro Valley Minimum Design Standards.

2. Proposed Rights-of-Way

There are no streets being proposed within this development. Only private access lanes and parking area access lanes are being proposed as part of this development. Access lanes and parking areas will be constructed to Oro Valley's standards.

3. Proposed Pedestrian / Bicycle Circulation

This development will make pedestrian and bicycle connections to Rancho Vistoso Blvd, which has existing sidewalks and striped bicycle lanes that run for its entirety. Sidewalks will be installed to all proposed residences from the parking areas. Pavement striping will be provided in the parking areas to clearly delineate pedestrian access ways.

K. RECREATION & TRAILS

1. Off-site Trail Access

There are no existing trails within the direct proximity of the project site. However, this project will provide pedestrian access to the sidewalk along Rancho Vistoso Blvd, which leads to public trail access points further north along Big Wash.

2. Open Space Ownership

The proposed recreation areas and other open spaces of the Avilla Rancho Vistoso will be owned and maintained by the property owner. The main recreation area for this site will be located near the leasing office and will include a variety of amenities, including a pool, outdoor kitchen, green space, shaded seating Pareas, and a small dog park. OVZCR permits enhanced amenities such as those listed above to offset part of the required open space acreage. This project proposes such a credit according to the following calculations:

Units:	87
Land Price per Sq. Ft:	$6.35
Standard Req'd. Rec. Area (1 Ac. / 85 Units):	44,585 Sq. Ft.
Value of Standard Rec. Area Land:	$283,024
Typical Cost of Standard Rec. Area of Req'd. Size:	$309,175
Total Cost to Meet Standard Rec. Area Requirements:	$592,199
Proposed Rec. Area Size:	36,136 Sq. Ft.
Value of Proposed Rec. Area Land:	$229,390
Expected Cost of Enhanced Rec. Area:	$619,399
Total Cost to Provide Enhanced Rec. Area:	$848,789

L. SCHOOLS

1. Student Generation

   This proposed development is expected by Amphitheater School District to generate approximately ten elementary students, six middle school students, and four high school students (using the accepted standard student multiplier of 0.1082 multifamily elementary students per household, 0.0694 multifamily middle school students per household, and 0.0406 multifamily high school students per household). The typical demographics of Avilla neighborhoods includes above-average percentages of single people and empty nesters, so the expected student generation is actually less than the Amphitheater School Districts standard calculated estimate.

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.

Exhibit III-L-1: School District Letter

AMPHITHEATER
Public Schools

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

DELIVERED VIA ELECTRONIC MAIL

August 24, 2021

Clay Goodwin
Paradigm Land Design, LLC
Avilla Rancho Vistoso Project
claygoo@gmail.com

RE: Tangerine Road/Rancho Vistoso Blvd. Planned Area Development

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	89 Multifamily Units
Elementary	10
Middle	6
High School	4

The census multipliers we use to obtain these projections are 0.1082 multifamily elementary students per household, 0.0694 multifamily middle school students per household, and 0.0406 multifamily high school students per household.

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

The schools which 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	645	290
Coronado K-8	1213	535
Ironwood Ridge High	2541	882

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

Sincerely,

Kristin Magdziasz

Kristin Magdziasz
Administrative Assistant to the Legal Department

M. WATER

1. Water Demand

   A good estimate for domestic water usage is 230 gallons per day per residence dry weather flow. With 87 residences being proposed in this development, the total domestic water use is projected at 20,010 gallons per day. In contrast, under the Property's existing commercial zoning a shopping center developed at a floor area ratio of 0.3 would typically use roughly 15,780 gallons per day.

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 Rancho Vistoso Blvd. right-of-way.

N. SEWER

1. Sewer Service Method

   Pima County Regional Wastewater Reclamation Department will provide sewer service to this development. Capacity is currently available for this project in the public sewer G-87-054, downstream from manhole 8761-34. This project will connect to an existing private sewer manhole within its southern boundary, which was constructed by the developers of the Safeway shopping center to provide sewer service for this Property. See Exhibit III-N-1: Sewer Capacity Letter.

Exhibit III-N-1: Sewer Capacity Letter

PIMA COUNTY
WASTEWATER RECLAMATION
201 NORTH STONE AVENUE
TUCSON, ARIZONA 85701-1207

JACKSON JENKINS
DIRECTOR

PH: (520) 724-6500
FAX: (520) 724-9635

August 16, 2021

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

Sewerage Capacity Investigation No. P21WC00250 Type I

RE: **Avilla Rancho Vistoso, Parcel 21954003B**
Estimated Flow 19,224 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-87-054, downstream from manhole 8761-33.

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 further information is needed, please feel free to contact us at (520) 724-6488.

Reviewed by: Mirela Hromatka, Planner Sr.

O. BUFFERYARDS

1. Mitigation

A landscape bufferyard will be provided around the portions of the project perimeter as required by the Oro Valley Zoning Code to help soften any visual impacts to surrounding landowners. The bufferyards will be composed from a variety of native vegetation and will help blend this residential neighborhood with the surrounding developments.

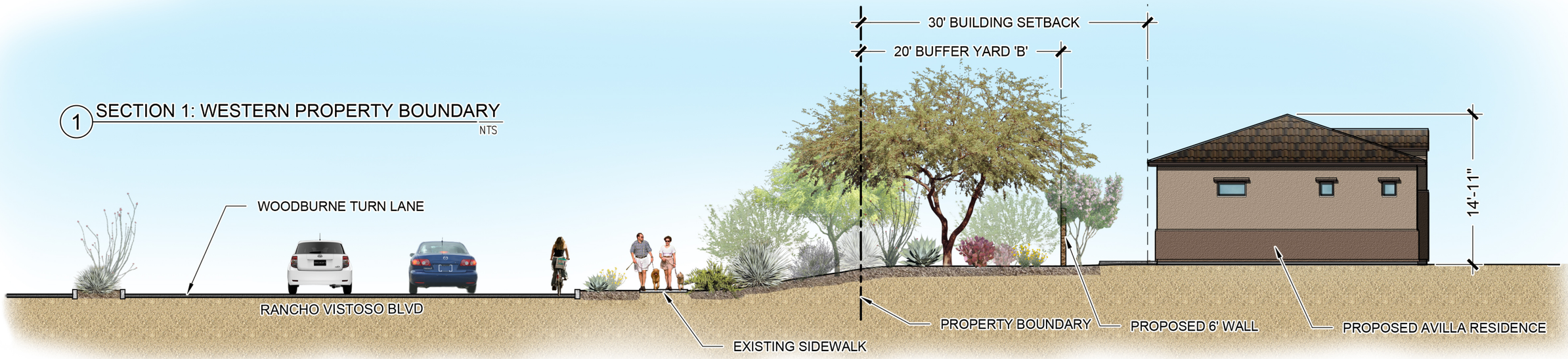
The project's only residential neighbors are located to the north and will be significantly higher in elevation than the proposed homes. That elevation difference will also serve to reduce the visual impacts of this development.

Even so, it is also important to remember that this Property is currently zoned for commercial development, which would undoubtedly have a significant impact on nearby neighbors.

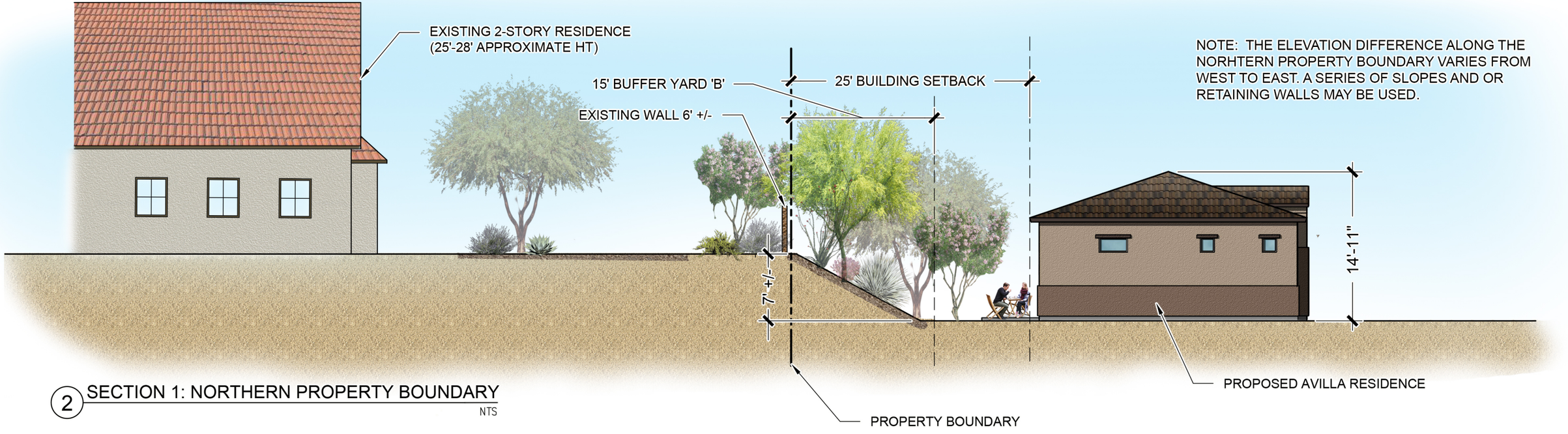
Adjacent Use	Bufferyard Type & Width
North – Horizons Subdivision (High Density Zoning)	Type 'A' / 10 Feet
East – Open Space	Type 'A' / 10 Feet
South – Safeway Shopping Center (Commercial Zoning)	Not Required
West – Rancho Vistoso Blvd.	Type 'B' / 25 Feet

See Exhibit III-O-1: Bufferyard Cross-Sections and Exhibit III-A-1: Tentative Development Plan.

Landscape Sections



1 SECTION 1: WESTERN PROPERTY BOUNDARY
NTS



2 SECTION 1: NORTHERN PROPERTY BOUNDARY
NTS

Avilla Rancho Vistoso

PROJECT: NXM-01 DATE: 1.5.22
FILE NAME: NXM-01 SECTIONS.DWG

THE PLANNING CENTER
a division of TPC Group, Inc.

APPENDIX A – SITE RESOURCE INVENTORY

SITE RESOURCE INVENTORY
AVILLA RANCHO VISTOSO EAST
2200136

PROJECT OVERVIEW

1. A multi-family development is proposed for the site.
2. Existing Site Conditions and Vegetative Community: The 2020 aerial imagery accurately reflects the current site conditions. Prevalent tree species are foothill palo verde (*Parkinsonia microphylla*), velvet mesquite (*Prosopis velutina*), catclaw acacia (*Senegalia greggii*), whitethorn acacia (*Vachellia constricta*) and blue palo verde (*Parkinsonia florida*). Shrubs include creosote (*Larrea tridentata*), desert hackberry (*Celtis pallida*), graythorn (*Ziziphus obtusifolia*) and wolfberry (*Lycium sp.*). Sub-shrubs and forbs include bursage (Ambrosia deltoidea), brittlebush (*Encelia farinosa*), Wright's desertpeony *(Acourtia wrightii)*, odora *(Porophyllum gracile)*, burroweed (*Isocoma tenuisecta*), desert zinnia (*Zinnia acerosa*), and fairy duster (*Calliandra eriophylla*). Cholla species (*versicolor and fulgida*) and prickly pear species are the most common cacti on site. Additional cacti / succulents include barrel (*Ferocactus wislizeni*), hedgehog (*Echinocereus sp.*), and pincushion (*Mammillaria sp.*). Saguaro (*Carnegiea gigantea*) cacti are rare. Grasses were prominent on the site and included mucronate sprangletop (*Dinebra panicea)*, six-weeks gramma (*Bouteloua barbata*), Mexican panicgrass (*Panicum hirticaule*), Rothrock's grama (*Bouteloua rothrockii*), six-weeks needle grama (*Bouteloua aristidoides*), purple three-awn (*Aristida purpurea*) and bush muhly (*Muhlenbergia porteri*).

SITE RESOURCE INVENTORY NOTES & MITIGATION OF SIGNIFICANT VEGETATION

1. 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 meeting the criteria for Significant Vegetation are shown on the SRI.
2. No stands of Significant Vegetation were noted.
3. Mitigation of Significant Vegetation shall be in accordance with TOV Zoning Code Section 27.6.B.4.j.
4. Significant Vegetation Information:
   a. Amount present within Grading Limits (canopy diameter assessed as two times the height of tree): 28,886 SF
   b. Amount being disturbed: 28,310 SF
   c. Total percentage disturbed: 98%
   d. Mitigation Ratio: 2:1
5. 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 transplant.

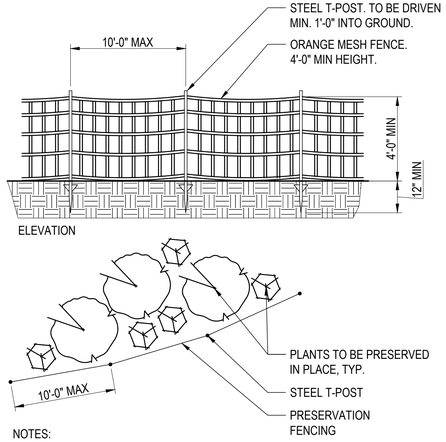
A. HEALTH: Plant health is good to excellent with no major infestations or apparent diseases. "Plant health" is defined as a plant in a sound state, free from disease and expected to survive for five (5) or more years.
B. SIZE & AGE: The plant is of a size and age to suggest a likely chance of transplant 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. Two highly invasive species were observed on the site within the project area.
   a. Buffelgrass (*Pennisetum ciliare*), an invasive 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 source.
2. 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.
3. To prevent the introduction and spread of invasive species seeds, all equipment to be used on the site shall be washed and free of all plant/vegetation and soil/mud debris prior to entering the construction site.
4. To prevent invasive species seeds from leaving the site, the contractor shall remove all attached plant/vegetation and soil/mud debris from equipment prior to leaving the construction site.
5. Continual monitoring for invasive species, and removal, is recommended.

GENERAL NOTES

1. The gross area of development is 8.05 +/- acres
2. Total acres of graded area: 8.05 +/- acres
3. Total acres of undisturbed area: 0.0
4. Required Open Space: 30% meaningful open space
5. 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 inventoried.
6. 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)
7. 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.
8. Plant locations were determined with the assistance of a global positioning system. This system is accurate to within approximately one foot.



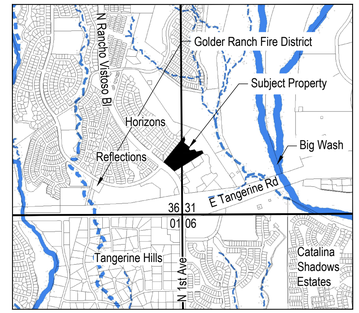
NOTES:
1. When excavating within 4'-0" from dripline of plants to be preserved in place, hand clear to minimize damage to root systems.
2. If roots are encountered during excavation, redirect roots into existing soil areas where possible. If redirection is not possible, cut roots cleanly with sharp pruning 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.

1 PROTECTIVE FENCING

NTS

INVENTORIED SIGNIFICANT VEGETATION

ID	Caliper (Inches)	Height (Feet)	Trans-plantable	Criteria	Disposition	Notes
Parkinsonia florida, Blue Palo Verde (PF)						
11	19	15	No	B: Size and Age	RFS	
Parkinsonia microphylla, Foothill Palo Verde (PM)						
1	13	13	No	C: Damage	RFS	Dieback, Trunk Damage
2	17	12	No	B: Size and Age	RFS	
3	17	14	No	B: Size and Age	RFS	
4	15	14	No	E: Topography	RFS	
5	21	15	No	B: Size and Age	RFS	
7	12	13	No	D: Soils	RFS	
8	12	12	No	G: Form	RFS	
17	14	12	No	E: Topography	RFS	
18	20	17	No	E: Topography	RFS	
19	12	12	No	E: Topography	RFS	
20	14	12	No	A: Health	RFS	Significant Dieback
21	24	16	No	B: Size and Age	RFS	
22	17	13	No	B: Size and Age	RFS	
23	15	12	No	A: Health	RFS	
24	13	12	No	E: Topography	PIP	
25	13	12	No	B: Size and Age	RFS	Box Candidate
26	13	12	No	B: Size and Age	RFS	Box Candidate
27	15	12	No	B: Size and Age	RFS	
28	14	12	No	B: Size and Age	RFS	
29	16	12	No	B: Size and Age	RFS	
30	16	12	No	B: Size and Age	RFS	
31	16	12	No	B: Size and Age	RFS	
32	15	15	No	A: Health	RFS	Significant Dieback
33	12	14	No	B: Size and Age	RFS	Box Candidate
34	17	12	No	D: Soils	RFS	
35	17	14	No	B: Size and Age	RFS	Box Candidate
39	18	16	No	B: Size and Age	RFS	
40	20	14	No	B: Size and Age	RFS	
41	12	12	No	B: Size and Age	RFS	Box Candidate
42	30	18	No	B: Size and Age	RFS	
43	21	14	No	E: Topography	RFS	
44	12	15	No	B: Size and Age	RFS	
45	19	14	No	B: Size and Age	RFS	
Prosopis velutina, Velvet Mesquite (PV)						
6	20	12	No	B: Size and Age	RFS	
9	26	20	No	B: Size and Age	RFS	
10	27	20	No	B: Size and Age	RFS	
12	17	15	No	B: Size and Age	RFS	
13	27	18	No	B: Size and Age	RFS	
14	14	18	No	B: Size and Age	RFS	
16	17	16	No	B: Size and Age	RFS	
36	21	14	No	B: Size and Age	RFS	
37	12	16	No	C: Damage	RFS	
46	36	17	No	B: Size and Age	RFS	
47	25	20	No	B: Size and Age	RFS	
49	13	15	No	E: Topography	RFS	
Sengalia greggii, Catclaw Acacia (SG)						
38	17	12	No	C: Damage	RFS	
Vachellia constricta, Whitethorn Acacia (VC)						
15	12	15	No	B: Size and Age	RFS	
48	12	16	No	E: Topography	RFS	



LOCATION MAP

Portion of Section 36, Township 11S, Range 13E and Section 31, Township 11S, Range 14E, G & S.R.M., Town of Oro Valley, Pima County, Arizona
ASSESSOR PARCEL NUMBER (APN) 219-54-003B

3" = 1 Mile

SIGNIFICANT VEGETATION SUMMARY

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	1		29	3	33
Prosopis velutina	Velvet Mesquite			12		12
Senegalia greggii	Catclaw Acacia			1		1
Vachellia constricta	Whitethorn Acacia			2		2
TOTAL ALL SPECIES		1	0	45		49

SIGNIFICANT VEGETATION MITIGATION

Required mitigation is per Table 27-1 and % Significant Vegetation disturbance. 49 Significant Trees were inventoried; 45 are designated for removal. Three of the 49 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 98%.

Species	QTY of Viable SV to be Removed	Mitigation Ratio	Replacement Trees (48" Box)	Replacement Trees (36" Box)	Understory Plants Required
Parkinsonia florida (Blue Palo Verde)	1	2:1	1	1	10
Parkinsonia microphylla (Foothill Palo Verde)	29	2:1	29	29	290
Prosopis velutina (Velvet Mesquite)	12	2:1	12	12	120
Senegalia greggii (Catclaw Acacia)	1	2:1	1	1	10
Vachellia constricta (Whitethorn Acacia)	2	2:1	2	2	20
TOTAL MITIGATION REQUIRED			**45**	**45**	**450**

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.

SYMBOL / LINETYPE LEGEND

SYMBOL	ELEMENT
	Area of Invasive Plants
	Property Boundary
	Building Offset Limit
	Existing Contour, 1' Interval
	Preservation Fencing

SHEET INDEX

OWNER

PWP LLC
8701 E VISTA BONITA DRIVE, #220
SCOTTSDALE, AZ 85255

ATTENTION: STEWART JEAN
PH: 602-264-1300
EMAIL: SJEAN@PARKWESTPARTNERS.COM

DEVELOPER

NEXMETRO DEVELOPMENT LLC
2355 E CAMELBACK RD #805
PHOENIX, AZ 85016

ATTENTION: JARED GEISLER
PH: 602-339-2091
EMAIL: JARED@NEXMETRO.COM

LANDSCAPE ARCHITECT

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

APPROVAL

PLANNING & ZONING ADMINISTRATOR

DATE

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

REGISTERED LANDSCAPE ARCHITECT 50915 JENNIFER PATTON ARIZONA U.S.A. EXPIRES 6/30/2023

Date: June 22, 2022
Designed By: Wilder Team; Checked By: JP

REVISIONS:
Rev. # Date Description

SITE RESOURCE INVENTORY COVER SHEET AND SUMMARY TABLES

Avilla Rancho Vistoso East

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

ORO VALLEY CASE #: 2200136
REF CASE #: OV12-06-28, 2101944

SITE RESOURCE INVENTORY

40 20 0 40

1" = 40'-0"

SYMBOL LEGEND
Significant Vegetation

Plant Type	Preserve in Place (PIP)	Transplant on Site (TOS)	Remove From Site (RFS)	Remove From Site (Health)
Tree, Significant		N/A		

INVENTORIED PLANTS

Abbrev	BOTANICAL NAME	COMMON NAME
PF	Parkinsonia florida	Blue Palo Verde
PM	Parkinsonia microphylla	Foothill Palo Verde
PV	Prosopis velutina	Velvet Mesquite
SG	Senegalia greggii	Catclaw Acacia
VC	Vachellia constricta	Whitethorn Acacia

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

ID

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

SYMBOL / LINETYPE LEGEND

SYMBOL	ELEMENT
	Area of Invasive Plants
	Property Boundary
	Building Offset Limit
	Existing Contour, 1' Interval
	Preservation Fencing

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA 811
Call 811 or click Arizona811.com

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

CERTIFIED LANDSCAPE ARCHITECT
50915
JENNIFER PATTON
ARIZONA U.S.A.
EXPIRES 6/30/2023

Date: June 22, 2022
Designed By: Wilder Team; Checked By: JP

REVISIONS:

Rev. #	Date	Description

SITE RESOURCE INVENTORY PLAN

Avilla Rancho Vistoso East

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

ORO VALLEY CASE #: 2200136
REF CASE #: OV12-06-28, 2101944

APPENDIX B – BIBLIOGRAPHY

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