MARANA AZ
ESTABLISHED 1977

MARANA PLANNING COMMISSION
REGULAR COMMISSION MEETING
NOTICE AND AGENDA
11555 W. Civic Center Drive, Marana, Arizona 85653
Council Chambers, August 31, 2022, at or after 6:00 PM

Thomas Schnee, Chairman
Ronald Hill, Vice Chair
David Bowen, Commissioner
Don Duncan, Commissioner
John Flint, Commissioner
John McIntyre, Commissioner
Joseph Parsons, Commissioner

Pursuant to A.R.S. § 38-431.02, notice is hereby given to the members of the Marana Planning Commission and to the general public that the Planning Commission will hold a meeting open to the public on August 31, 2022, at or after 6:00 PM located in the Council Chambers of the Marana Municipal Complex, 11555 W. Civic Center Drive, Marana, Arizona.

ACTION MAY BE TAKEN BY THE COMMISSION ON ANY ITEM LISTED ON THIS AGENDA. Revisions to the agenda can occur up to 24 hours prior to the meeting. Revised agenda items appear in *italics*.

Marana Planning Commission
Welcome to this public meeting of the Marana Planning Commission. The Commission consists of seven citizens who are appointed by the Town Council and serve without pay. For the most part, the Commission acts in an advisory capacity to the Town Council on matters related to land use planning and zoning. Citizens are encouraged to address the Commission with their concerns on agenda items during the public testimony portions of the meeting, or other issues at the Call to the Public.

Meeting Times
Regular Commission meetings are usually held on the last Wednesday of each month at 6:00 PM at the Marana Municipal Complex, although the date or time may change and additional meetings may be called at other times and/or places.

Speaking at Meetings
If you are interested in speaking to the Commission during the Call to the Public or Public Hearings, you must fill out a speaker card (located inside the Council Chambers) and deliver it to the Planning Commission Secretary prior to the convening of the meeting.

All persons attending the Commission meeting, whether speaking to the Commission or not, are expected to observe the Commission rules, as well as the rules of politeness, propriety, decorum and good conduct. Any person interfering with the meeting in any way, or acting rudely or loudly will be removed from the meeting and will not be allowed to return.

Accessibility
To better serve the citizens of Marana and others attending our meetings, the Council Chambers are wheelchair and handicapped accessible. Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting the Town Clerk at (520) 382-1999. Requests should be made as early as possible to arrange the accommodation.

Agendas
Copies of the Agenda are available the day of the meeting inside the Council Chambers or online at www.maranaaz.gov.

This Notice and Agenda posted no later than 24 hours prior to the meeting, at the Marana Municipal Complex, 11555 W. Civic Center Drive, the Marana Operations Center, 5100 W. Ina Road, and at www.maranaaz.gov.

Public Comments
Please submit public comments to tbyler@maranaaz.gov. Any submitted comments from the public will be provided to the Commission and included within the Commission packet file and a summary of the comments submitted will be reflected in the official Commission meeting minutes of that meeting. All emailed comments must be received by the Town no later than 12:00 p.m. (noon) on the day of the meeting to be included.

REGULAR COMMISSION MEETING

CALL TO ORDER

PLEDGE OF ALLEGIANCE

INVOCATION/MOMENT OF SILENCE

ROLL CALL

CALL TO THE PUBLIC
At this time, any member of the public is allowed to address the Planning Commission on any issue within the jurisdiction of the Planning Commission, except for items scheduled for a Public Hearing at this meeting. The speaker may have up to three (3) minutes to speak. Any persons wishing to address the Commission must complete a speaker card (located at the rear of the Commission Chambers) and deliver it to the Commission Secretary prior to this agenda item being called. Pursuant to the Arizona Open Meeting Law, at the conclusion of Call to the Public, individual members of the Commission may respond to criticism made by those who have addressed the Commission, and may ask staff to review the matter, or may ask that the matter be placed on a future agenda. However, members of the Commission shall not discuss or take legal action on matters raised during an open call to the public unless the matters are properly noticed for discussion and legal action.

APPROVAL OF AGENDA

ANNOUNCEMENTS

GENERAL ORDER OF BUSINESS

A. Approval of the July 27, 2022 Meeting Minutes

B. Public Hearings

1. **PCZ2203-002 Grier and Sanders Commercial Corner**; A request for a recommendation to the Marana Town Council for approval to rezone approximately 7.0 acres of land from Zone A – Small Lot Zone and R-6 (Single-Family Residential) to Neighborhood Commercial (NC) generally located south of Grier Road and east of Sanders Road within a portion of Section 28, Township 11S, Range 11E. (Brian D. Varney).

2. **PCZ2109-001 SWC Tangerine and Thornydale Specific Plan;** A request for a recommendation to the Marana Town Council for approval to rezone approximately 50.92 acres of land from R-144 (Residential) to Specific Plan (SP). The property is generally located west of Thornydale Road and south of Tangerine Road within a portion of Section 6, Township 12S, Range 13E. (Brian D. Varney)

C. Commission Action

Opening remarks by an applicant should not exceed ten minutes. Comments by others should not exceed three minutes.

D. Informational Items/Possible Action Items

FUTURE AGENDA ITEMS

EXECUTIVE SESSIONS

Pursuant to A.R.S. 38-431.03, the Planning Commission may vote to go into executive session, which will not be open to the public, to discuss certain matters.

Executive Session pursuant to A.R.S. §38-431.03 (A), Planning Commission may ask for discussion or consideration, or consultation with designated Town representatives, or consultation for legal advice with the Town Attorney, concerning any matter listed on this agenda for any of the reasons listed in A.R.S. §38-431.03 (A).

ADJOURNMENT

Planning Commission Regular Meeting
Meeting Date: 08/31/2022

To: Planning Commission

From: Terri Byler, Executive Assistant

Date: August 31, 2022

Subject: **Approval of the July 27, 2022 Meeting Minutes**

Attachments

2022.7.27 Planning Commission Minutes

MARANA PLANNING COMMISSION

REGULAR COMMISSION MEETING

11555 W. Civic Center Drive, Marana, Arizona 85653
Council Chambers, July 27, 2022, at or after 6:00 p.m.

Thomas Schnee, Chairman
Ronald Hill, Vice Chair
David Bowen, Commissioner
Don Duncan, Commissioner
John Flint, Commissioner
John McIntyre, Commissioner
Joseph Parsons, Commissioner

DRAFT

SUMMARY MINUTES

CALL TO ORDER

Chairman Schnee called the meeting to order at 7:28 p.m.

PLEDGE OF ALLEGIANCE AND INVOCATION/MOMENT OF SILENCE

ROLL CALL

Chairman Schnee directed the commission secretary to call roll. All commission members were present. A quorum was present.

CALL TO THE PUBLIC

APPROVAL OF AGENDA

Motion to approve the agenda by Commissioner Flint, seconded by Vice Chair Hill. Motion passes, 7-0.

ANNOUNCEMENTS

GENERAL ORDER OF BUSINESS

Approval of the Regular Planning Commission Meeting Minutes of April 27, 2022.

Motion to approve by Vice Chair Hill, seconded by Commissioner Flint. Motion passes, 7-0.

PUBLIC HEARINGS

COMMISSION ACTION

INFORMATIONAL ITEMS/POSSIBLE ACTION ITEMS

ELECTION OF BOARD CHAIRPERSON AND VICE-CHAIRPERSON

Motion moved by Commissioner Duncan nominate Tom Schnee as Chair of the Planning Commission. Seconded by Commissioner McIntyre. Motion passed unanimously, 6-0.

Motion moved by Tom Schnee to nominate Ron Hill as Vice Chair of the Planning Commission. Seconded by Commissioner Duncan. Motion passed unanimously, 6-0.

FUTURE AGENDA ITEMS

ADJOURNMENT

Chairman Schnee asked for a motion to adjourn the meeting. Commissioner Flint, *moved and Commissioner McIntyre second the motion. Motion passed unanimously. Meeting adjourned at 7:29 p.m.*

CERTIFICATION

I hereby certify that the foregoing are the true and correct minutes of the Marana Planning Commission meeting held on July 27, 2022. I further certify that a quorum was present.

Terri Byler

Terri Byler, Commission Secretary

DRAFT

Planning Commission Regular Meeting

Meeting Date: 08/31/2022

To: Planning Commission

From: Brian Varney, Senior Planner

Date: August 31, 2022

Strategic Plan Focus Area:
Not Applicable

Subject: **PCZ2203-002 Grier and Sanders Commercial Corner**; A request for a recommendation to the Marana Town Council for approval to rezone approximately 7.0 acres of land from Zone A – Small Lot Zone and R-6 (Single-Family Residential) to Neighborhood Commercial (NC) generally located south of Grier Road and east of Sanders Road within a portion of Section 28, Township 11S, Range 11E. (Brian D. Varney).

Discussion:

Request

Paradigm Land Design, LLC is requesting a recommendation to the Marana Town Council for approval to rezone approximately 7.0 acres of land from Zone A – Small Lot Zone and R-6 (Single-Family Residential) to Neighborhood Commercial (NC).

Marana General Plan

The 2040 Marana General Plan designates the proposed rezoning area with the land use category of Traditional Neighborhood (TN), which does accommodate the requested Neighborhood Commercial zoning and typical neighborhood-scaled commercial development and office uses equal to or less than 15 acres in size.

Surrounding Land Use and Site Characteristics

The rezoning area is bordered on the north by Grier Road and primarily by property that is currently undeveloped agricultural land zoned 'SP' Marana Towne Center Specific Plan. There is a very small portion of land northwest of the rezoning area that is zoned Zone A – Small Lot Zone. The rezoning area is bordered on the east by land zoned Zone A that is developed with single-family residential uses. To the southeast is undeveloped agricultural land zoned 'F' Las Pilas Specific Plan. The land adjacent, to the south of the rezoning area, is zoned R-6 Residential and being developed as the Village at Barnett, a single family residential subdivision that is currently under construction. The rezoning area is bordered on the west by Sanders Road. Immediately west of Sanders Road is a parcel zoned Zone A – Small Lot Zone with a vacant, commercial office building.

Of the seven acres within the rezoning area, five and one-half acres are currently vacant, undeveloped land, and the eastern one and one-half acres contain a single-family residence. The site is characterized by a very flat topography and is minimally impacted by sheet flooding, predominantly from east to west, largely conveyed by Grier Road. A portion of the rezoning area falls within the AO flood zone. Additional engineering will be performed at future development plan review and most likely, a floodplain use permit will be required.

Proposed Land Use

The preliminary development plan for the proposed rezoning area indicates the potential for a mixture of neighborhood-scale commercial uses on the seven acre site. The site analysis proposes a few different scenarios for development. It is anticipated the majority of the site will be developed with typical neighborhood-scale commercial uses, as indicated for Pads 1 - 4 on the preliminary development plan, and a professional office use(s) on Pad 5. A comprehensive design review will be performed for all proposed development, and compliance with the Town's Multi-family, Commercial, and Industrial Design Standards will be required. Any

future commercial development proposed within the rezoning area will be subject to a complete review, and approval by staff, of a detailed development plan package including all improvement plans, landscape plans, and building elevation plans.

Access and Circulation

Access to the rezoning area is proposed at a few locations off of Grier Road. Access from Sanders Road will be considered by the Marana Traffic Engineering Division upon submittal and review of a development plan for the site, as well as a thorough analysis of the off-site road conditions at that time. Anticipated right-of-way dedications will include 45 feet on Grier Road and 5 feet on Sanders Road. Turn lanes off of Grier Road, and possibly Sanders Road, will be required as warranted by the traffic study and further analysis of such warrants at the time of development plan review. Pedestrian access to the site will be accommodated by the construction of a 5-foot concrete sidewalk along the Grier Road frontage, as well as an asphalt shared-use path to be constructed along the Sanders Road frontage connecting to the path constructed by the Village at Barnett to the south. A traffic study has been reviewed by the Marana Traffic Engineering Division and further evaluation will occur at the time of development plan submittal when actual uses have been defined. Future on-site traffic circulation will also be evaluated at that time.

Utilities

The rezoning area is located within the Town of Marana's intended water service area. A 6-inch water line runs along Grier Road and an 8-inch line is located along Sanders Road. Water service agreement(s) will be necessary as required by Marana Water, and all necessary on-site and off-site water infrastructure will be required to be constructed by the property owner / developer at the time of development. The rezoning area is also located within the Town's wastewater service area. A 15-inch sewer line is located within a 30' public sewer easement along the west property boundary. The rezoning area falls within the service areas of the Northwest Fire District, Tucson Electric Power, and Southwest Gas.

Citizen Participation

The applicants directly notified, by correspondence, all property owners within 1000 feet offering to meet and discuss the project. Two individuals responded to the letter, and met with the applicants. The applicants reported that no concerns were expressed during either meeting.

Public Notification

This public hearing was appropriately noticed in The Daily Territorial, and all property owners within 300 feet of the boundary of the rezoning area were noticed by United States mail of the date, time, and topic of the public hearing. Additional notice was posted at various locations within the community.

Case Analysis Review Criteria

Pursuant to Town Code section 17-3-1(D), the Planning Commission and Town Council shall consider the following criteria, at a minimum, in reviewing an application for rezoning:

- Any change of character in the area due to installation of public facilities, other zone changes, new growth trends, deterioration, and development;
    - *Based upon the requirements and conditions, the rezoning amendment does not appear to be detrimental to the character of the area due to installation of public facilities or any other rezoning changes*
- The degree to which the proposed zoning will benefit the community; whether there will be benefits derived by the community, or area, by granting the proposed rezoning;
    - *With the acceptance of the recommended conditions, this rezoning will benefit the community by providing opportunities for the development of neighborhood commercial services.*
- Whether the proposed rezoning is compatible with the surrounding area or whether there will be adverse impacts on the capacity or safety of the portion of street network influenced by the rezoning, parking problems, or environmental impacts that the new use will generate such an excessive storm runoff, water, air, or noise pollution, excessive nighttime lighting, or other nuisances;
    - *Based on the recommended requirements and conditions, the rezoning amendment is*

compatible with the surrounding area and does not appear to adversely impact the adjacent street network or generate such excessive storm runoff, water, air, or noise pollution, excessive nighttime lighting, or other nuisances.

- Whether the proposal conforms with and is in furtherance of the implementation of the goals and policies of the general plan, other adopted plans, and the goals, objectives and policies of the land development code, and other town regulations and guidelines, including goals and policies relating to economic development;
    - *The rezoning amendment conforms with the goals and policies of the general plan, the land development code, and other town regulations and guidelines.*
- The zoning districts and existing land uses of the surrounding properties;
    - *Based on the recommended requirements and conditions, the rezoning amendment is compatible with the surrounding properties zoning and existing land uses.*
- Whether the existing and proposed transportation infrastructure is suitable and adequate to serve the traffic anticipated to be generated by the proposed development;
    - *With the acceptance of the recommended conditions, the existing and proposed transportation infrastructure is suitable and adequate to serve the traffic anticipated to be generated by the proposed development.*
- Whether the existing and proposed utility infrastructure, public facilities, and public services are suitable and adequate to serve the proposed rezoning area;
    - *Based upon the rezoning requirements and conditions, there is adequate utility infrastructure, public facilities, and public services in the area to serve the proposed rezoning area.*
- Whether the subject property is suitable for the uses to which it has been restricted under the existing zoning classification;
    - *Based upon the rezoning requirements and conditions, the subject property is suitable for the proposed uses.*
- Whether the rezoning is compatible with the adjacent neighborhood, especially residential neighborhood stability and character;
    - *Based upon the rezoning requirements and conditions, this rezoning amendment is compatible with the adjacent neighborhood in area stability and character.*
- If applicable, the length of time the subject property has remained vacant as zoned;
    - *The majority (5.5 acres) of the subject property has remained vacant since annexation to the Town. The remaining 1.5 acres has contained a single-family residence for many years.*
- Whether there is an adequate supply of land available in the subject area and the surrounding community to accommodate the zoning and community needs;
    - *Based upon the rezoning amendment subject area location, there is an adequate supply of land available in the area and the surrounding community to accommodate the zoning and community needs.*

Staff Recommendation:

This is a discretionary item for the Planning Commission to consider. Should the Commission choose to recommend approval of this item to the Town Council, staff recommends it be based upon the recommended findings and subject to the following conditions:

1. Compliance with all applicable provisions of the Town's codes and ordinances current at the time of any subsequent development including, but not limited to, requirements for public improvements and payment of application fees and applicable development impact fees.
2. Any plat or development plan for any portion of the Rezoning Area shall be in general conformance with the Preliminary Development Plan presented to and approved by the Town Council as part of this Rezoning.
3. A master drainage study must be submitted by the Property Owners and accepted by the Town Engineer prior to Town approval of a plat or development plan for any portion of the Rezoning Area.
4. A water infrastructure and phasing plan (WIP) must be submitted by the Property Owners and

accepted by the Marana Water Department prior to approval of a plat or development plan for any portion of the Rezoning Area. The WIP shall identify all on-site and off-site water facilities needed to serve the proposed development. The WIP shall include all information required by the water provider, such as, but not limited to, analysis of water use and fire flow requirements, and well source, reservoir, and booster station infrastructure needed to serve the proposed development. If Marana Water requires a water service agreement as a condition of service to the proposed development, the Property Owners must enter into a water service agreement with the Marana Water consistent with the accepted WIP.

5. A master sewer plan must be submitted by the Property Owners and accepted by the Marana Water Department (the “wastewater utility”) prior to the approval of any plat or development plan for the Rezoning Area. The master sewer plan shall identify all on-site and off-site wastewater facilities needed to serve the proposed development, and shall include all information required by the wastewater utility. If the wastewater utility requires a sewer service agreement as a condition of service to the proposed development, the Property Owners must enter into a sewer service agreement with the wastewater utility consistent with the accepted master sewer plan.
6. The Property Owners must design and construct any roadway, drainage, water, and wastewater improvements, and dedicate or acquire any property rights associated with those improvements, that the Town requires based on the data and findings of the accepted traffic impact analysis, the accepted master drainage study, the accepted WIP, the accepted master sewer plan, and other studies approved in connection with the approval of a plat or development plan for any portion of the Rezoning Area.
7. The final design of all streets and circulation facilities, including gated access (if applicable), must be accepted by the Northwest Fire District prior to approval of a plat or development plan for any portion of the Rezoning Area.
8. No approval, permit or authorization by the Town of Marana authorizes violation of any federal or state law or regulation or relieves the Property Owners from responsibility to ensure compliance with all applicable federal and state laws and regulations, including the Endangered Species Act and the Clean Water Act. The Property Owners should retain appropriate experts and consult appropriate federal and state agencies to determine any action necessary to assure compliance with applicable laws and regulations.
9. The Property Owners shall transfer to the water provider, by the appropriate Arizona Department of Water Resources form, those water rights being IGR, Type I or Type II for providing designation of assured water supply and water service to the Rezoning Area. If Type I or Type II is needed on the Rezoning Area, the water provider and the Property Owners shall arrive at an agreeable solution to the use of those water rights appurtenant to the affected portion of the Rezoning Area.
10. Prior to the issuance of any grading permits, the Property Owners shall submit evidence to the Town that all federal permit requirements have been met through the Corps of Engineers and the State Historic Preservation Office, if federal permits are required for the development of the Rezoning Area.
11. The Property Owners shall not cause any lot split of any kind without the written consent of the Town of Marana.
12. The Property Owners shall install a non-potable system to serve the common open space areas and other landscape amenities, as accepted by the Cortaro-Marana Irrigation District.

Suggested Motion:

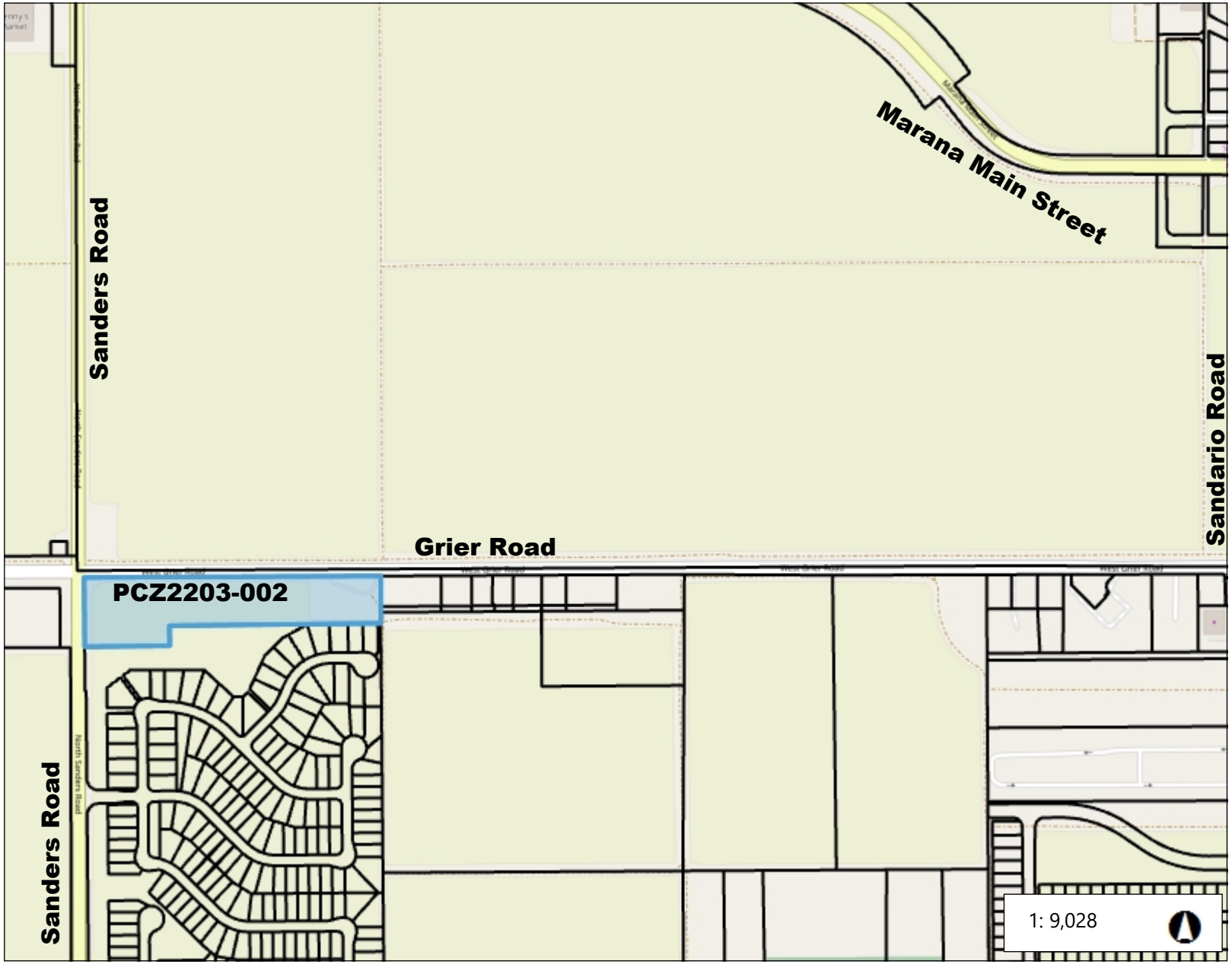
I move to recommend to the Town Council approval of PCZ2203-002, Grier and Sanders Commercial Corner Rezoning, subject to the recommended conditions.

Attachments

PCZ2203-002 GSCC Map

Town of Marana Planning

PCZ2203-002: Grier and Sanders Commercial Corner Rezoning





Legend

- Marana Town Limits
- Parcel Labels
- Parcels (Black)

Notes

0.3 0 0.14 0.3 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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THIS MAP IS NOT TO BE USED FOR NAVIGATION

Development Services / maranaplanning@maranaAZ.gov
11555 West Civic Center Drive / Marana, AZ 85653
Ph (520) 382-2600 / Fax (520) 382-2641 / maranaAZ.gov

PROJECT APPLICATION

APPLICATION TYPE

❑ Annexation	❑ Development Plan	❑ Development Plan Package	❑ General Plan Amendment
☒ Rezone	❑ Minor Land Division	❑ Significant Land Use Change	❑ Conditional Use Permit
❑ Specific Plan	❑ Landscape Plan	❑ Native Plant Plan/Exception	❑ SWPP
❑ Variance	❑ Hydraulic Model	❑ Sewer Capacity Assurance	❑ Sign Program
❑ Plat	❑ Improvement Plan	❑ Report (Type): _____	❑ Other: _____

PROJECT INFORMATION

Project Name: Barnett Retail & Offices	
Description of Project: Rezone	Number of Lots: n/a
Parcel No.(s): 217-41-010G	Gross Area (Acres): 7
Project Address: Not Assigned	
Ref. Project No.:	

CONTACT INFORMATION

Owner: Barnett Family Trust	Contact Name: Fred Barnett		
Address: PO Box 397	City: Marana	State: AZ	Zip: 85653
Email: fstfwdfred@aol.com	Phone No.: (520) 440-3733		
Applicant: (Same)	Contact Name:		
Address:	City:	State:	Zip:
Email:	Phone No.:		
Consultant/Engineer: Paradigm Land Design LLC	Contact Name: Paul Oland		
Address: 7090 N Oracle Rd #178-193	City: Tucson	State: AZ	Zip: 85704
Email: GPO@ParadigmLand.US	Phone No.: (520) 664-4304		

OWNER/APPLICANT AUTHORIZATION

I hereby certify that the information set forth in this application are true and correct to the best of my knowledge and that I am either the owner of the property or that I have been authorized in writing by the owner to file this application. (If applicant is not the owner, attach written authorization from the owner.)

Applicant Name (PRINT)	Signature	Date
	Paul Oland Digitally signed by Paul Oland Date: 2022.03.14 15:14:12 -07'00'	

FOR OFFICIAL USE ONLY

Project No._____ **Date Received**_____

Revision Date 03/29/2019

GRIER & SANDERS COMMERCIAL CORNER

REZONING SITE ANALYSIS

(PCZ2203-002)

PREPARED BY:

PARADIGM LAND DESIGN LLC

CONTACT: PAUL OLAND
GPO@PARADIGMLAND.US
(520) 664-4304

IN COLLABORATION WITH:

M Esparza Engineering, LLC

AUGUST 2022

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I. INTRODUCTION

A. PROJECT OVERVIEW

The Property subject to this rezoning request (the "Property") is proposed to be developed as a small mixed-use center consisting of 7.0± acres located at the southeast corner of Grier Road and Sanders Road in Marana, Arizona. This will allow for the property to be developed with 5.5± acres of neighborhood-scale commercial area, and 1.5± acres of office space. The property owner will also work to attract multifamily residential developers to develop all or a portion of the site for residential purposes as allowed by the NC zone. The project site is made up of parcel 217-41-010G and is owned by the Barnett Family Trust. Most of the property has been subject to farming for many years and is void of any native vegetation. The eastern portion of the property contains two existing single-family residences and contains minimal native vegetation. This project will contain a variety of retail, office, and restaurant pad spaces to respond to market demand for economic development near Downtown Marana. The Make Marana 2040 General Plan's "Traditional Neighborhood" designation is appropriate for the Property, as proposed.

This document has been prepared in support of a request to rezone the Property from "A-Small Lot Zone" and "R-6-Single Family Residential" to "NC-Neighborhood Commercial" in order to allow for the development as proposed.

The Town of Marana Strategic Plan 4 encourages new commercial development, especially in North Marana. It also calls for all new developments to provide pedestrian connectivity. This project will meet both of those goals and will also support the Plan's call for diverse housing opportunities if developed residentially.

B. PRIMARY OBJECTIVES

- Support economic growth by providing a prime location for new and existing businesses to expand their market and create employment opportunities.

- Provide a safe, clean, and attractive environment for business owners, employees, and future patrons.

- Construct a commercial development that is pedestrian friendly and compatible with both existing and future surrounding land uses.

Being bound on two of its four sides by major roads, this development will have minimal impact on nearby landowners. The subject property is mainly surrounded by undeveloped parcels to the north and west. Land to the south is currently under development as a residential subdivision, The Village at Barnett. Land to the east contains seven single-family residences, a Cortaro-Marana irrigation district facility and vacant agricultural land. This project has been carefully designed to be sensitive to nearby existing residences by providing landscape buffers around the entirety of the project and by including a land use transition between the residential homes to the east with office spaces creating a buffer from the retail portion of the project.

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. Site Location

   The Property consists of parcel 217-41-010G and is located within Township 11 south, Range 11 east, Section 28, Town of Marana, Arizona. The property totals 7.0± acres and is at the southeast corner of Grier Rand and Sanders Road. See Exhibit II-A-1: Site Location Map.

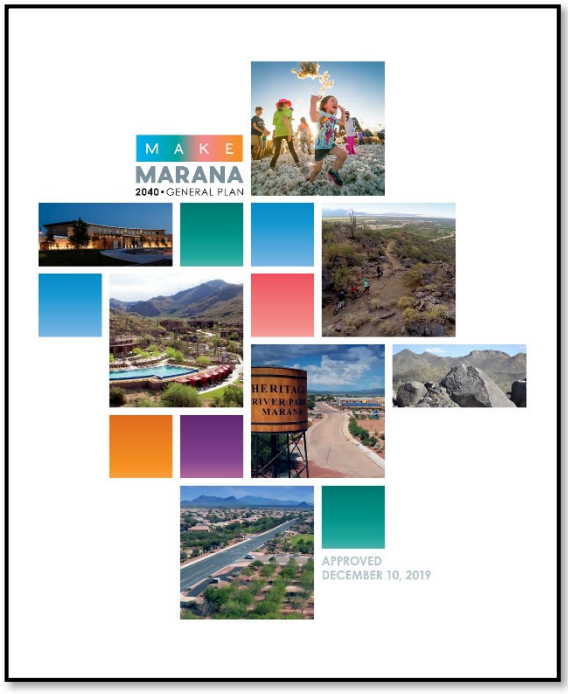
   Per Town of Marana Addressing the Project's administrative address is 12499 West Grier Road, Marana, AZ 85653.

2. Existing Land Uses, Onsite Zoning & General Plan

   Approximately 5.5± acres of the site are undeveloped and vacant, the remaining 1.5± acres contain two single-family residential homes. See Exhibit II-A-2: Existing Land Uses.

   Most of the Property is currently zoned A (Small Lot Zone), with a small portion along the southern boundary being zoned R-6 (Single-Family Residential). See Exhibit II-A-4: Existing Zoning.

   The Make Marana 2040 General Plan designates the Property as Traditional Neighborhood within the "Central Growth Area". As stated in the General Plan, this Central Growth Area is projected to become the main "Downtown" area for the Town of Marana. With lots of space for growth, this area is envisioned to include event and gathering spaces, shops, entertainment destinations, and employment opportunities. This project will contain a variety of retail and restaurant pad spaces to respond to market demand for economic development near Downtown Marana. See Exhibit II-A-3: Existing General Plan Land Uses.



3. Existing Adjacent Zoning and Land Uses

a. Surrounding Zoning & Land Uses

The Property is surrounded by properties featuring the following zoning designations and land uses. See Exhibit II-A-2: Existing Land Uses and Exhibit II-A-4: Existing Zoning.

N:	Existing zoning:	F-Specific Plan, Marana Towne Center
	Existing land use:	Grier Road and Vacant Farmland
NE:	Existing zoning:	F-Specific Plan, Marana Towne Center
	Existing land use:	Grier Road and Vacant Farmland
E:	Existing zoning:	A-Small Lot Zone
	Existing land use:	Single-Family Residential
SE:	Existing zoning:	F-Specific Plan, Las Pilas
	Existing land use:	Vacant Farmland
S:	Existing zoning:	R-6 Single-Family Residential
	Existing land use:	The Village at Barnett Single-Family Residential Subdivision (under construction)
SW:	Existing zoning:	A-Small Lot Zone
	Existing land use:	Sanders Road and Vacant Farmland
W:	Existing zoning:	A-Small Lot Zone
	Existing land use:	Sanders Road, a Vacant Building and Undeveloped Land
NW:	Existing zoning:	A-Small Lot Zone and F-Specific Plan, Marana Towne Center
	Existing land use:	Intersection of Grier Road and Sanders Road, and Vacant Farmland

b. Surrounding Building Heights

All structures nearby are single-story, some homes within the Village at Barnett subdivision that is currently under construction are two-story.

c. Nearby Pending Rezonings

There are no pending rezonings within one-quarter mile.

d. Nearby Approved Rezonings

The Las Pilas Specific Plan is immediately adjacent to the Property's southeastern corner, and the Marana Towne Center Specific Plan is immediately north of the Property. The Villages at Barnett subdivision that is directly south of this project was rezoned to R-6 several years ago.

e. Nearby Approved Subdivisions & Development Plans

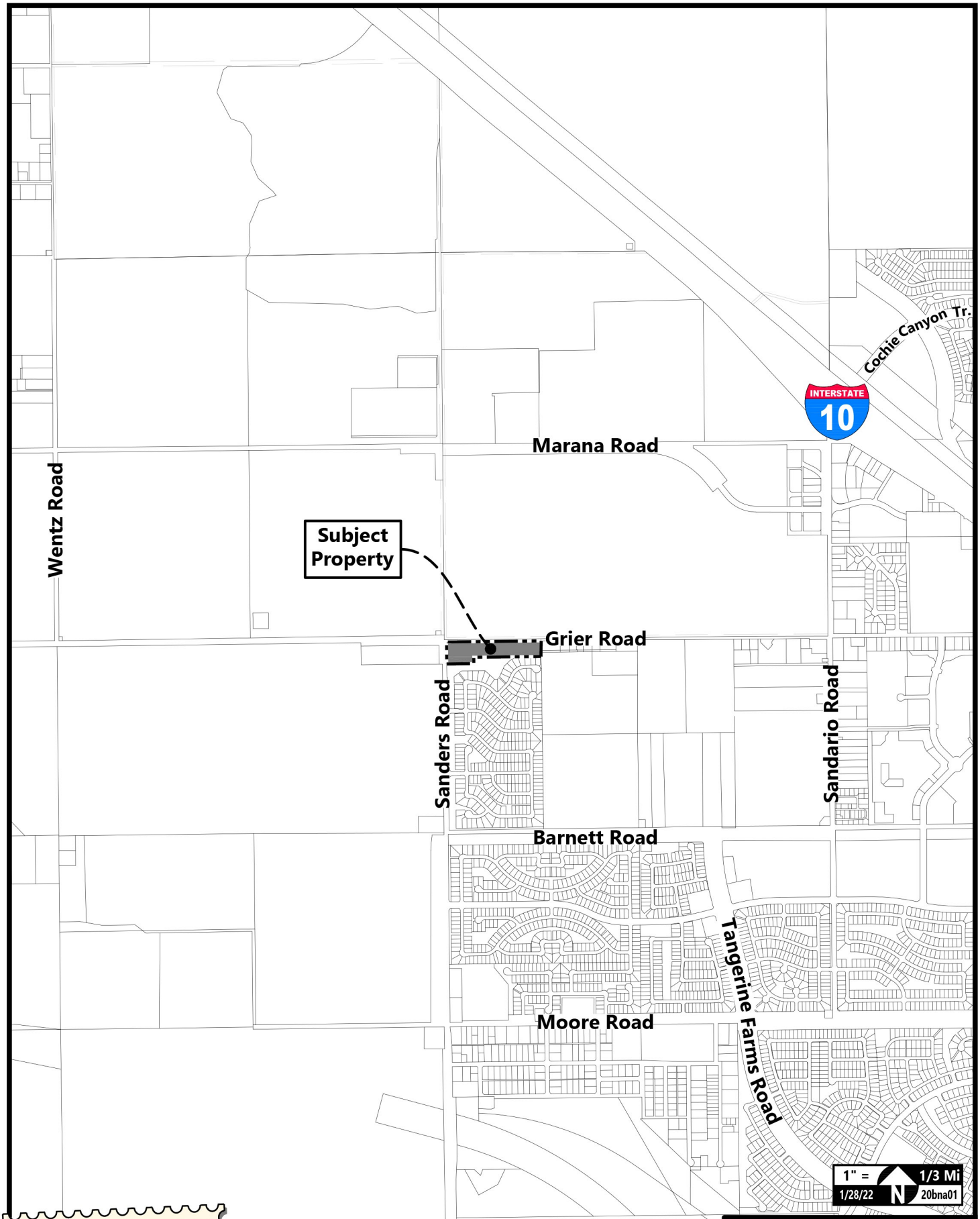
The Village at Barnett Subdivision is directly south of the property and is approved for 251 lots. It is currently under construction.

f. Architectural Styles used in Adjacent Properties

Architectural styles of site-built homes to the east of the project site are typical of most unplanned development in rural Marana. Architectural styles in the subdivisions to the south of the project site are typical of most planned developments in Marana, which is a mix of traditional and contemporary southwest homes. These homes are mainly wood frame homes that utilize stucco and stone veneer and have a gabled tile roof.

Single-Family Residential Neighbors to the East of the Project

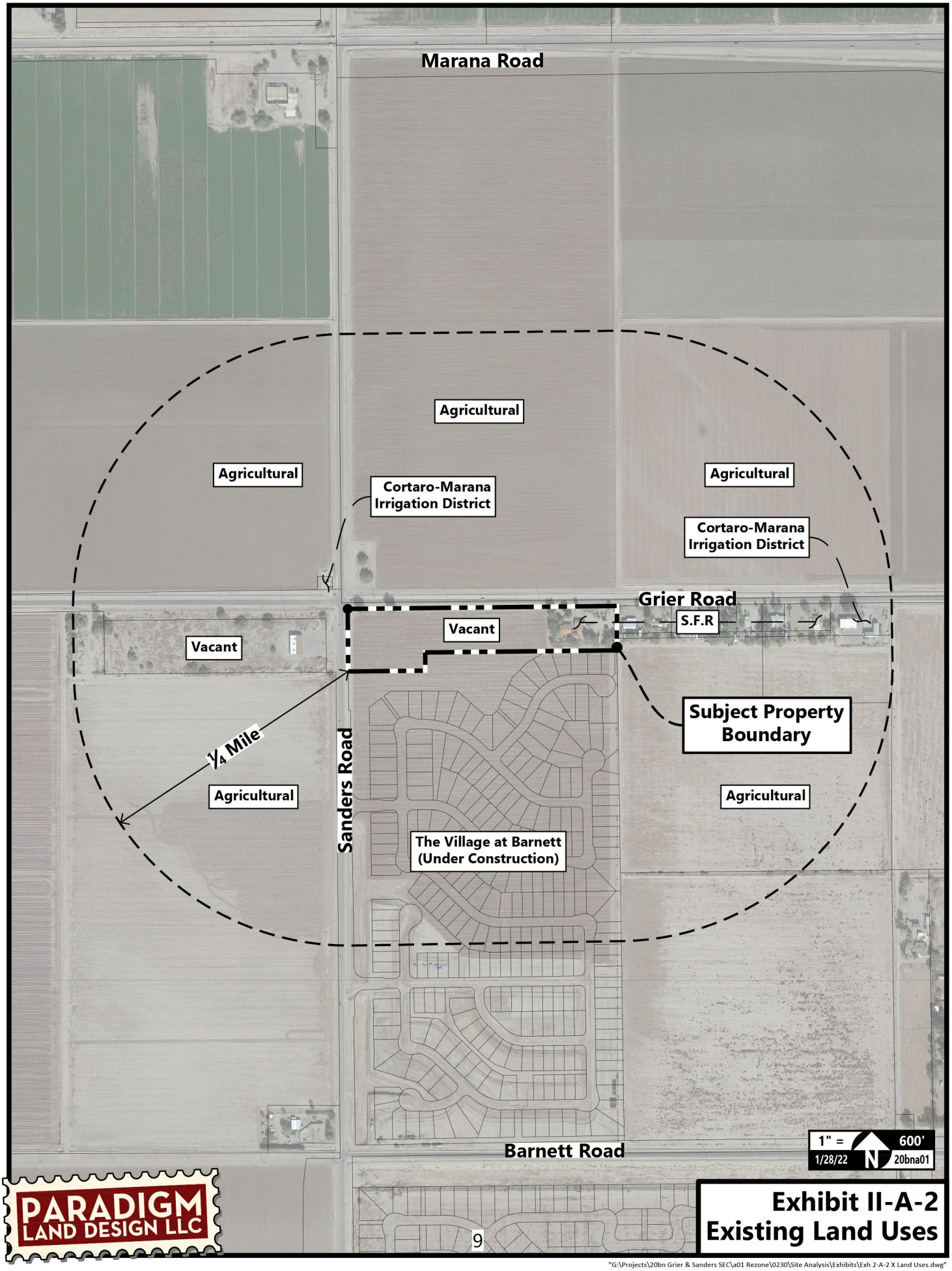




PARADIGM LAND DESIGN LLC

Exhibit II-A-1
Site Location Map

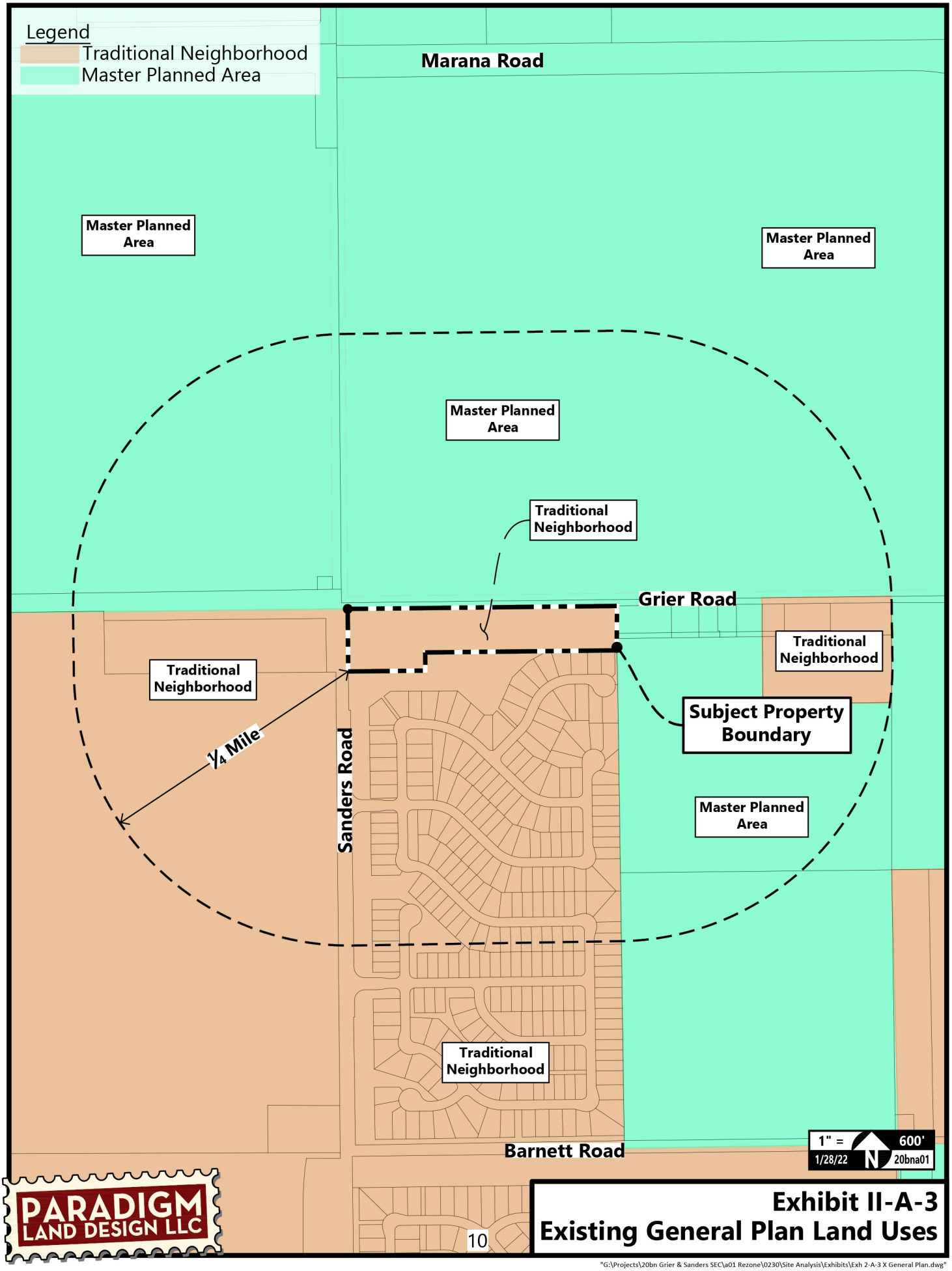
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PARADIGM LAND DESIGN LLC

Exhibit II-A-2
Existing Land Uses

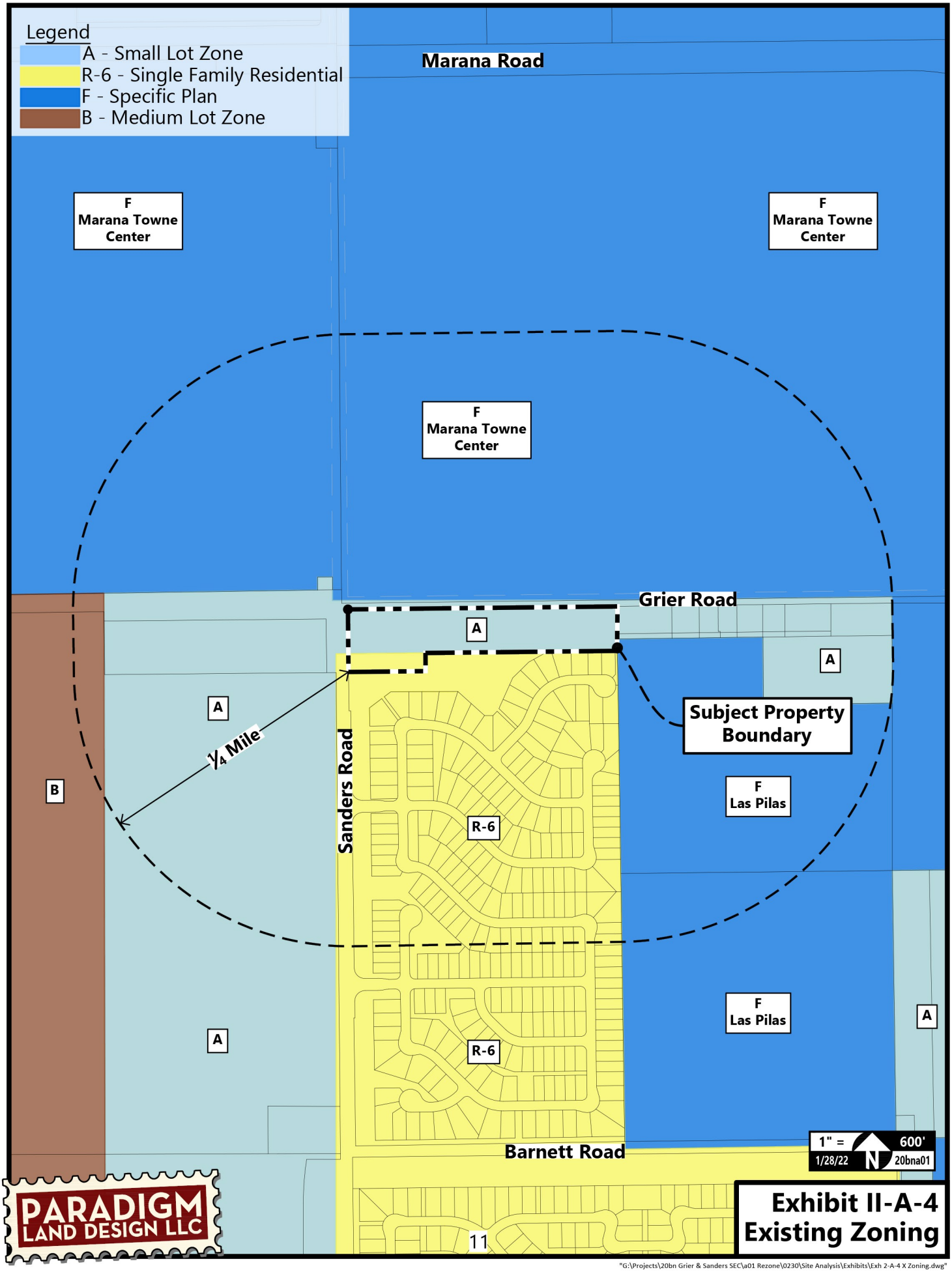
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PARADIGM LAND DESIGN LLC

Exhibit II-A-3
Existing General Plan Land Uses

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Legend
A - Small Lot Zone
R-6 - Single Family Residential
F - Specific Plan
B - Medium Lot Zone
Marana Road
F
Marana Towne
Center
F
Marana Towne
Center
F
Marana Towne
Center
Grier Road
A
A
A
A
A
B
¼ Mile
Subject Property
Boundary
Sanders Road
R-6
R-6
F
Las Pilas
F
Las Pilas
Barnett Road
1" = 600'
1/28/22
N
20bna01
PARADIGM
LAND DESIGN LLC
Exhibit II-A-4
Existing Zoning
"G:\Projects\20bn Grier & Sanders SEC\a01 Rezone\0230\Site Analysis\Exhibits\Exh 2-A-4 X Zoning.dwg"

B. TOPOGRAPHY AND SLOPE

1. Topographic Characteristics

The topography of the Property is characterized by extremely flat terrain. The property generally slopes gently downward from southeast to northwest. Elevations range from approximately 1,974 feet above sea level at the southeast corner to approximately 1,968 feet above sea level at the northwest corner of the property. The Property does not contain any hillside conservation areas, rock outcrops, slopes of 15% or greater, or other significant topographic features. See Exhibit II-B-1: Topography.

2. Pre-Development Slope

a. Average Cross-Slope

The pre-development average cross-slope of the Property is approximately 2.9%, according to the following formula:

C = Contour Interval
L = Length of Topographic Contours
A = Acreage of Property

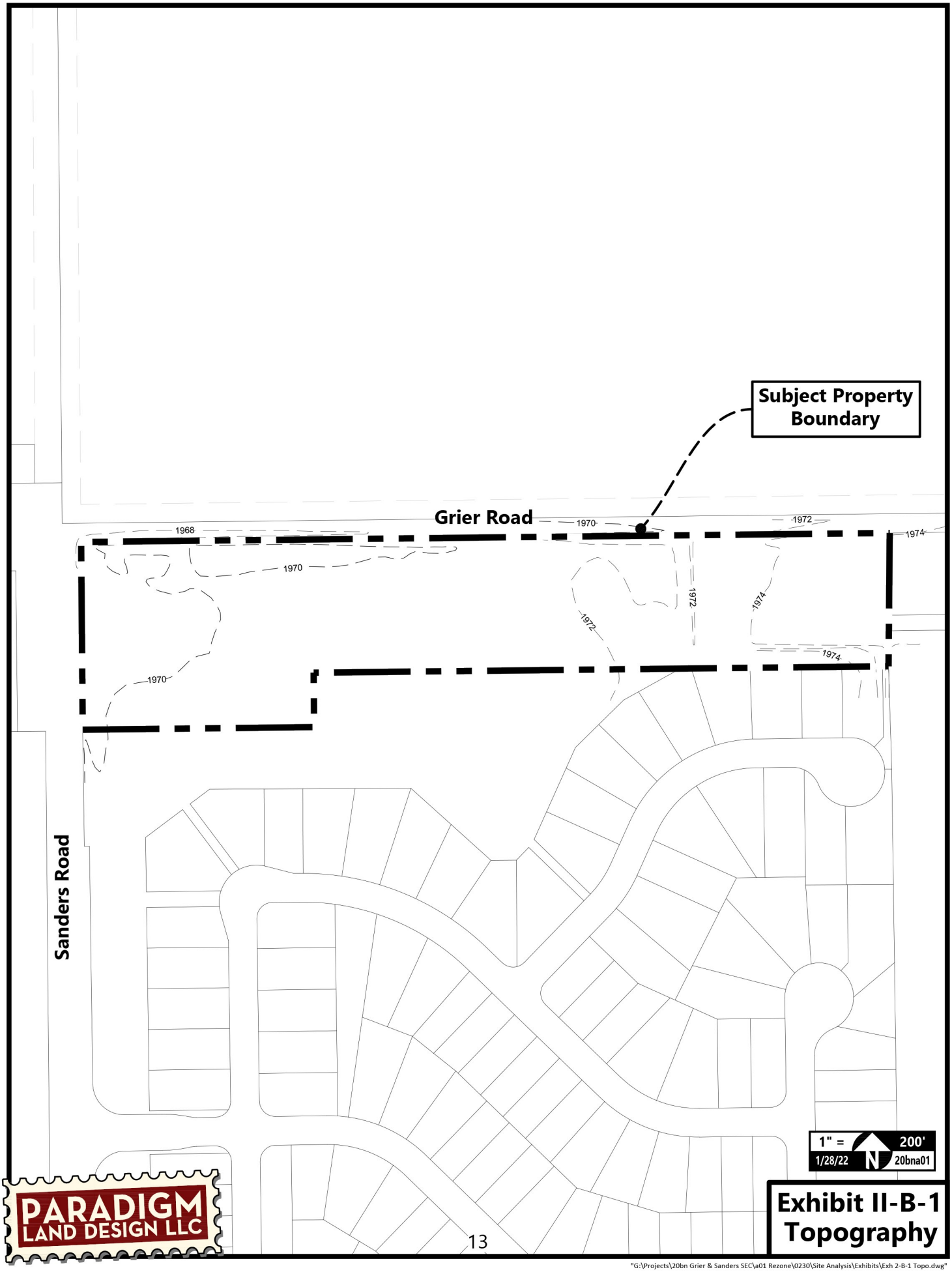
(C x L x 0.0023) / A = Average Cross Slope
(2' x 4,375' x 0.0023) / 7.0 = 2.9%

b. Average Overall Slope

The pre-development average overall slope is 0.004% from the southeast corner to the northwest corner of the project boundary.

A Completely Flat Site





PARADIGM LAND DESIGN LLC

Exhibit II-B-1
Topography

"G:\Projects\20bn Grier & Sanders SEC\a01 Rezone\0230\Site Analysis\Exhibits\Exh 2-B-1 Topo.dwg"

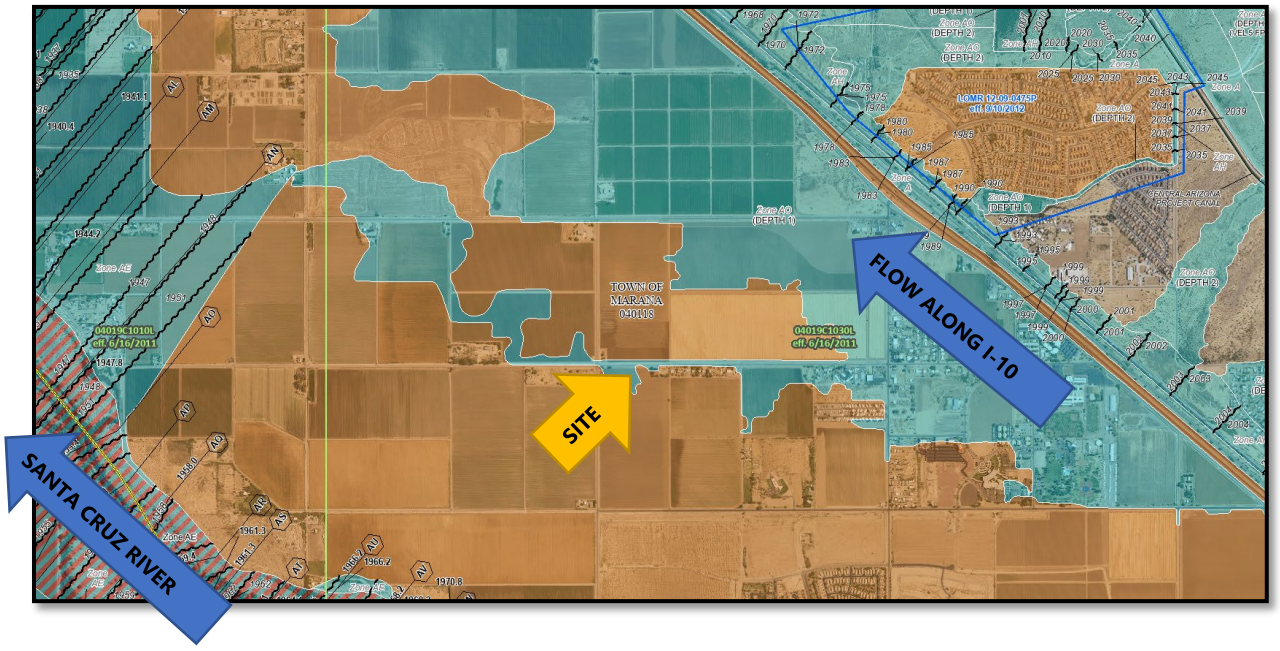
C. HYDROLOGY

1. Offsite Features Affecting Site

Storm drainage primarily enters the Property from the east as it flows within and along Grier Road. The storm drainage along Grier Road accumulates offsite from sheet flow coming off agricultural fields and other properties south of Grier Road. A trivial amount of storm drainage also enters the Property from the Villages at Barnett Common Area to the south. Downstream of the Property storm drainage continues to flow west within and along Grier Road, breaking out to the north within the agricultural field west of Sanders Road. From there, drainage sheet flows to the northwest and then west until joining the larger Santa Cruz River floodplain approximately 1.5 miles west/northwest of the Property. A floodplain use permit will be needed for construction in this area.

2. Acreage of Upstream Offsite Watersheds

The offsite watershed contributing area impacting this property is approximately 300± acres west of Interstate-10. The offsite watershed is characterized by agricultural fields and relatively low-density development with the exception of the Valley of the Sun MHP, the Marana Municipal Complex, and Marana Middle School. In addition, stormwater drainage enters Grier Road via culverts under Interstate-10 from the east. The FEMA AO-1 Zone correlating with Grier Road is a minor breakout from the larger FEMA AO Zone flowing northwest generally within one-half mile along the west side of Interstate-10.



3. Onsite Hydrology Characteristics

   a. 100-Year Floodplains with Discharges ≥ 50 CFS with flow depths greater than 0.2'

   The only regulated floodplain within the project site flows within and along Grier Road from east to west. In some areas the floodplain exceeds the Grier Road right-of-way, extending to the south into this and adjacent properties.

   b. Areas of Sheet Flooding and Average Depths

   Historically, the site and offsite areas have been characterized as sheet flooding areas with depths generally ranging from 0 to 1 foot (Refer to FEMA FIRM Panel 04019C1030L) depicted on Exhibit II-C-1: Onsite Hydrology.

   c. Federally mapped floodways and floodplains

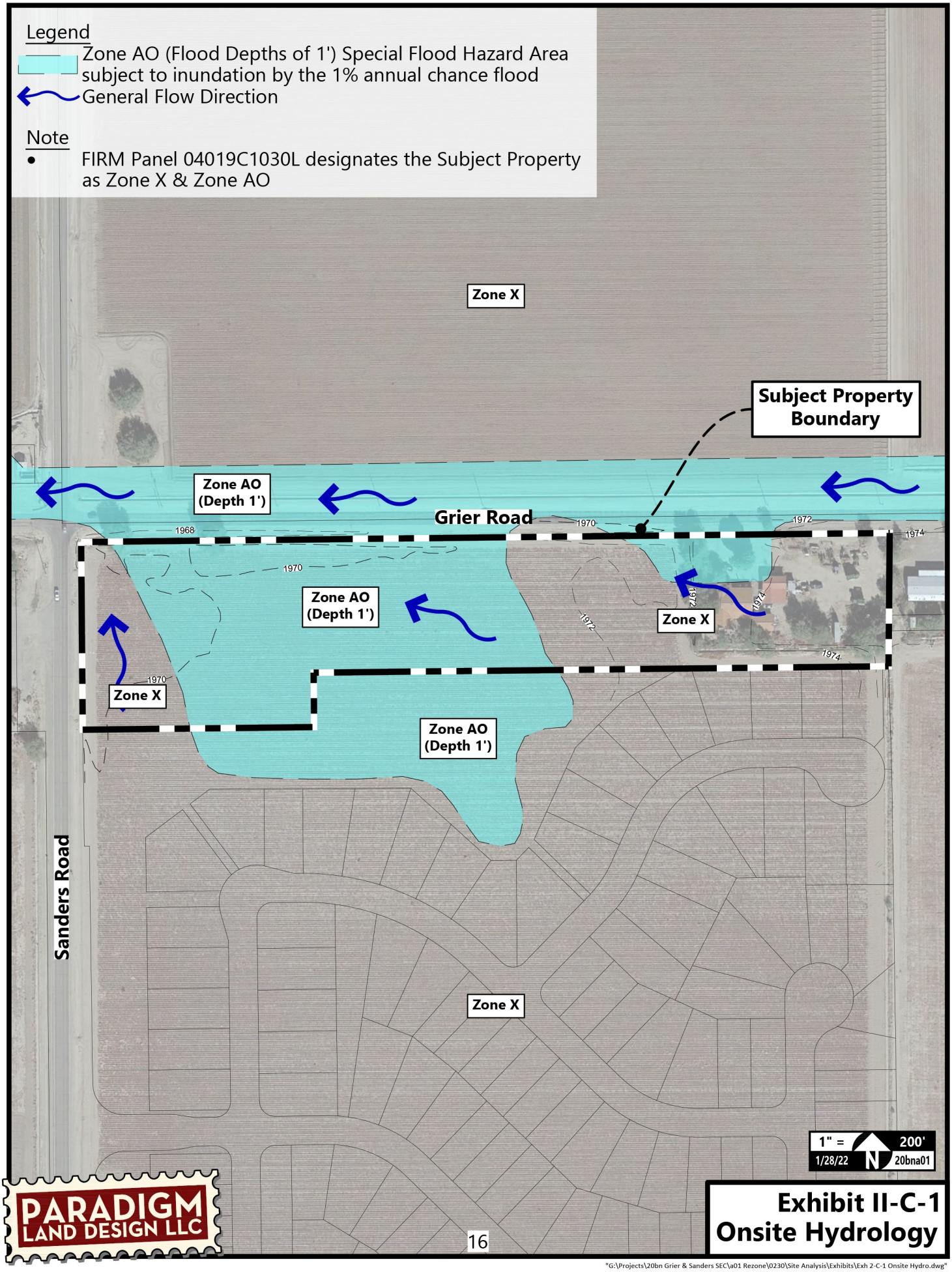
   The FEMA Flood Insurance Rate Map Panel 04019C1030L shows approximately half of the Property to be in Zone X which indicates "areas determined to be outside the 0.2% annual chance floodplain" and half the Property to be within Zone AO-1 which indicates "areas of 1% annual chance flooding with an average depth of 1 foot (usually sheet flow on sloping terrain).

4. Existing Drainage Conditions along the Downstream Property Boundary

Downstream of the Property storm drainage continues to flow west within and along Grier Road, breaking out to the north within the agricultural field west of Sanders Road. From there, drainage sheet flows to the northwest and then west until joining the larger Santa Cruz River floodplain approximately 1.5 miles west/northwest of the Property.

Downstream to the West along Grier Road





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D. VEGETATION

1. Onsite Vegetative Communities

   The Property has historically been used for agriculture purposes. Thus, there is very little existing native vegetation onsite. The only vegetation onsite is in the eastern portion of the site around the existing residences. There is no significant native vegetation within the limits of the Property.

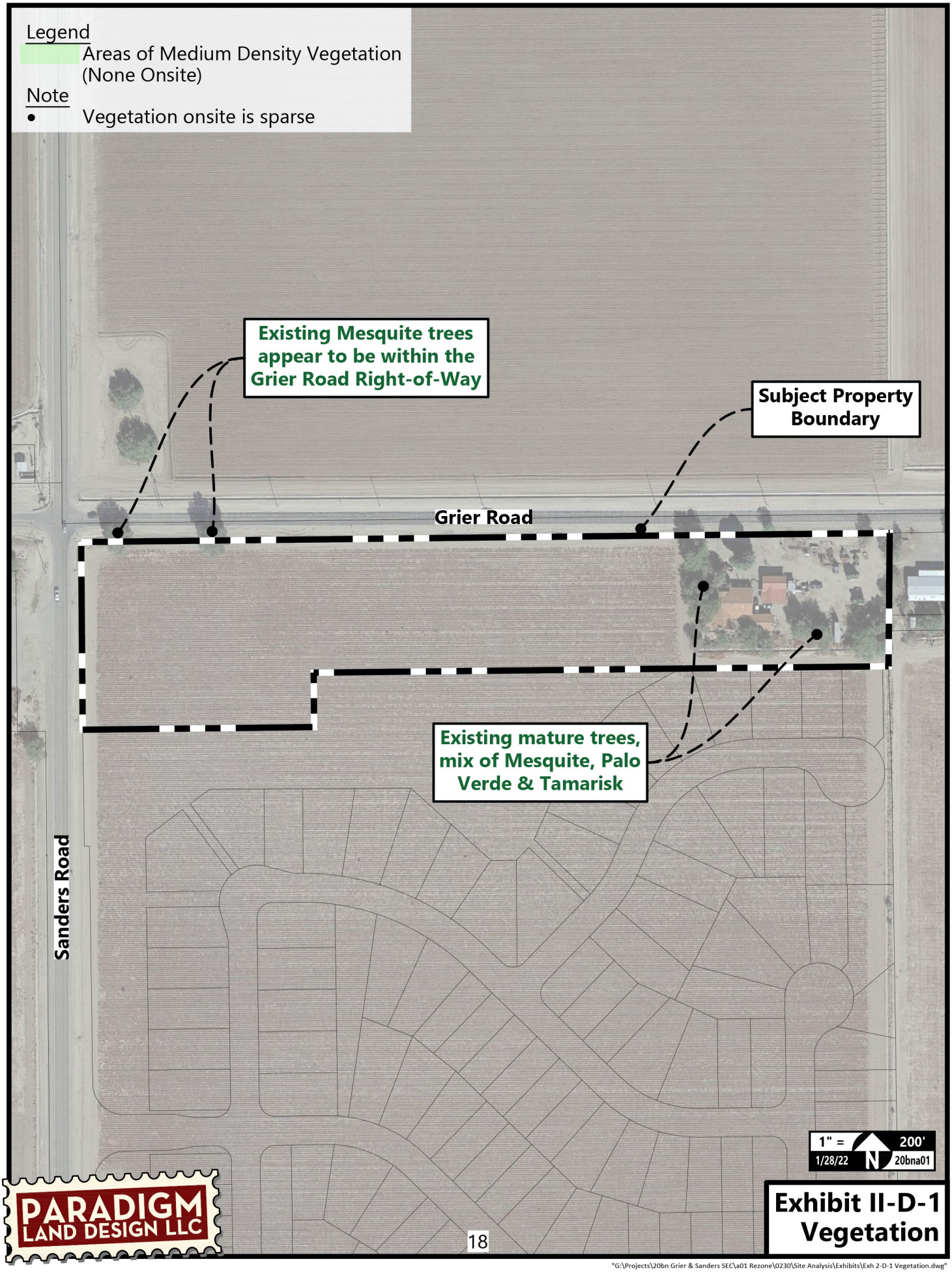
2. Significant, Threatened, or Endangered Flora

   No threatened or endangered flora are known to exist onsite.

3. Vegetative Densities

   Vegetative density of the Property is less than 5% plant cover. See Exhibit II-D-1: Vegetation.





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E. WILDLIFE

The Arizona Game and Fish Department's online review tool has been consulted, and the Environmental Review report, dated January 5, 2022, indicates that several federally listed species have been known to exist in the vicinity of this development. Any protected species encountered onsite will be handled according to applicable regulatory criteria. See Exhibit II-E-1: AZGFD Report.

Exhibit II-E-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:
SEC Grier & Sanders

User Project Number:
20bn01

Project Description:
The owner of this property would like to rezone the property to allow for the construction of a small commercial center at the SEC of Grier Road and Sanders Road. Possible uses include a small area for retail, 2-3 PAD spaces, and a small area for an office use.

Project Type:
Development Within Municipalities (Urban Growth), Commercial/industrial (mall) and associated infrastructure, New construction

Contact Person:
Clay Goodwin

Organization:
Paradigm Land Design LLC

On Behalf Of:
CONSULTING

Project ID:
HGIS-15253

Page 1 of 11

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

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 2 of 11

Exhibit II-E-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-E-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

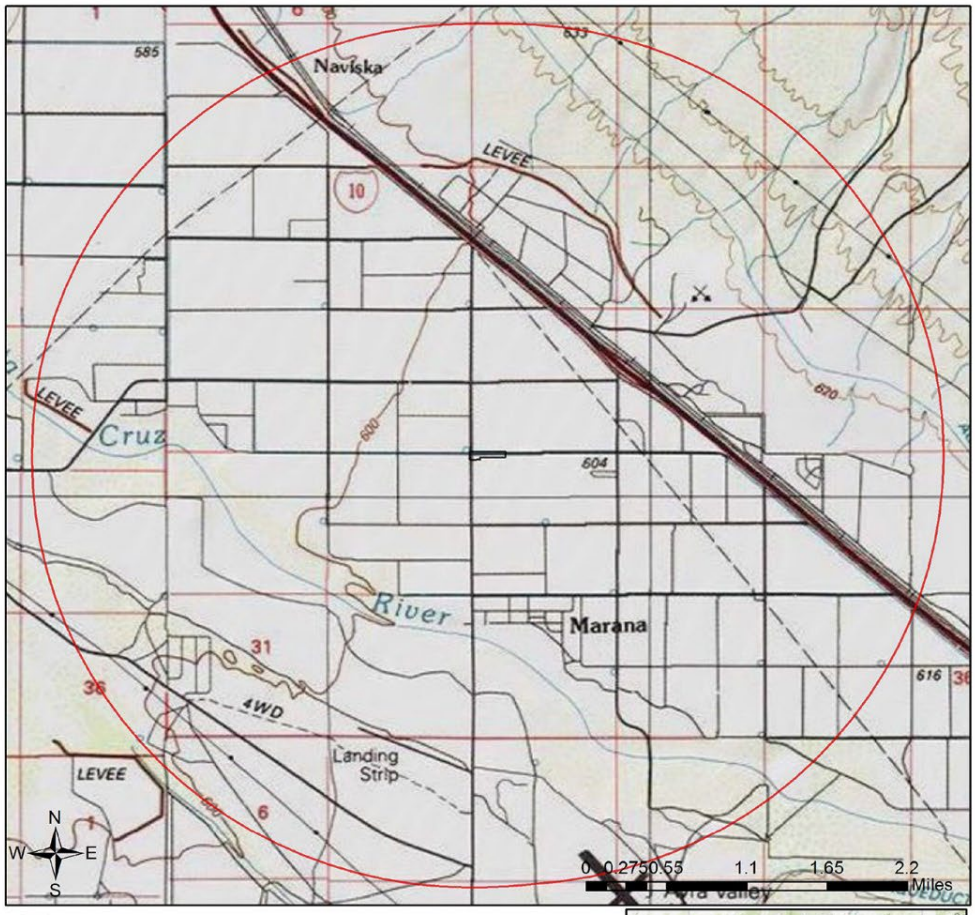
Exhibit II-E-1: AZGFD Report (cont'd)

Arizona Game and Fish Department
Project ID: HGIS-15253

project_report_sec_grier_sanders_48765_50263.pdf
Review Date: 1/5/2022 12:40:08 PM

SEC Grier & Sanders

USA Topo Basemap With Locator Map



Project Boundary

Buffered Project Boundary

Project Size (acres): 6.89

Lat/Long (DD): 32.4528 / -111.2321

County(s): Pima

AGFD Region(s): Tucson

Township/Range(s): T11S, R11E

USGS Quad(s): MARANA



Service Layer Credits: 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

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

Arizona Game and Fish Department
Project ID: HGIS-15253

project_report_sec_grier_sanders_48765_50263.pdf
Review Date: 1/5/2022 12:40:08 PM

SEC Grier & Sanders

Web Map As Submitted By User



Project Boundary
Buffered Project Boundary
id_pima

Project Size (acres): 6.89
Lat/Long (DD): 32.4528 / -111.2321
County(s): Pima
AGFD Region(s): Tucson
Township/Range(s): T11S, R11E
USGS Quad(s): MARANA

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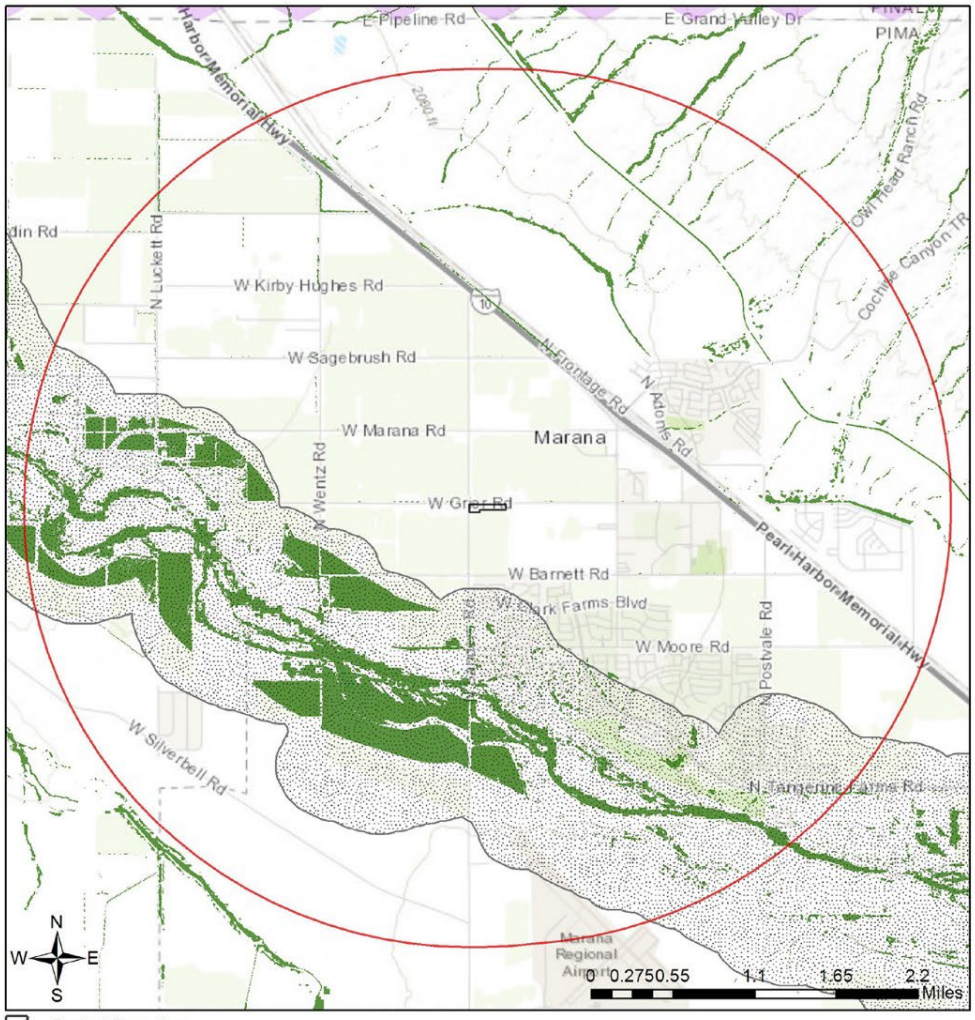
Exhibit II-E-1: AZGFD Report (cont'd)

Arizona Game and Fish Department
Project ID: HGIS-15253

project_report_sec_grier_sanders_48765_50263.pdf
Review Date: 1/5/2022 12:40:08 PM

SEC Grier & Sanders

Important Areas



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

Project Size (acres): 6.89
Lat/Long (DD): 32.4528 / -111.2321
County(s): Pima
AGFD Region(s): Tucson
Township/Range(s): T11S, R11E
USGS Quad(s): MARANA

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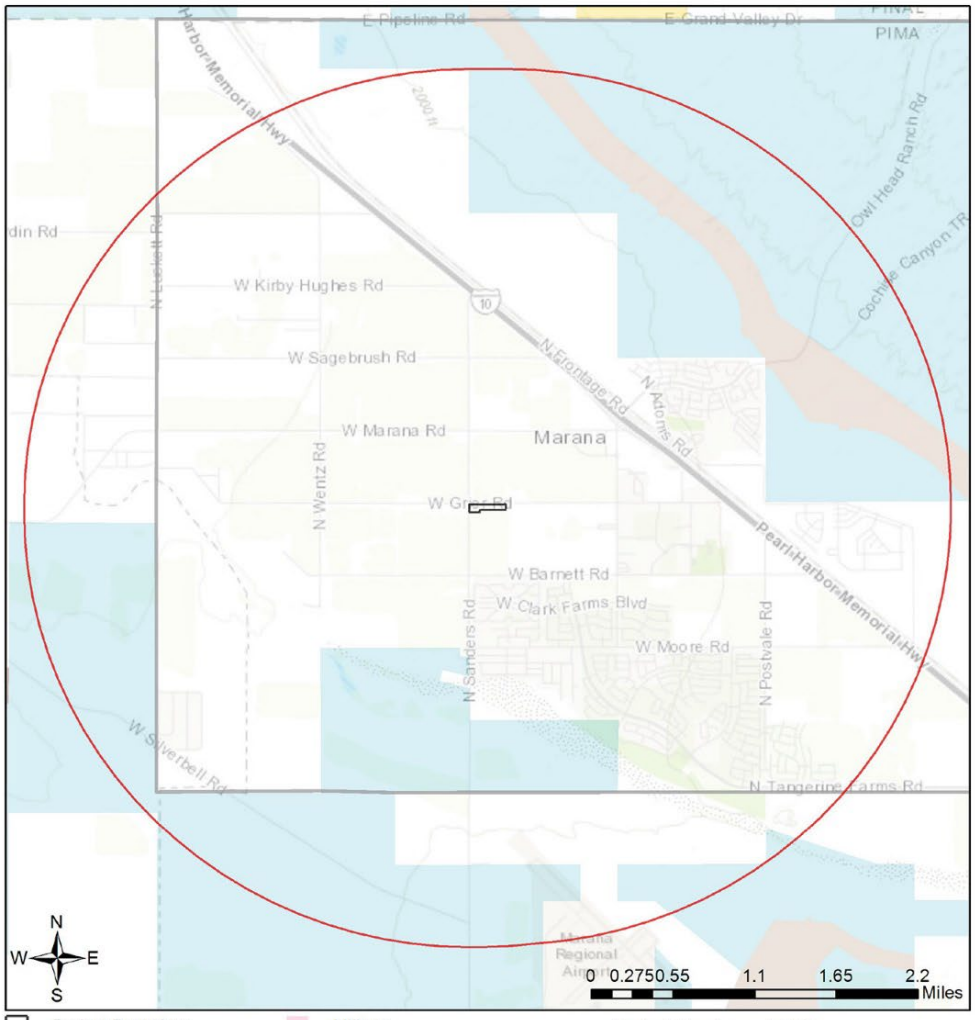
Exhibit II-E-1: AZGFD Report (cont'd)

Arizona Game and Fish Department
Project ID: HGIS-15253

project_report_sec_grier_sanders_48765_50263.pdf
Review Date: 1/5/2022 12:40:08 PM

SEC Grier & Sanders

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): 6.89
Lat/Long (DD): 32.4528 / -111.2321
County(s): Pima
AGFD Region(s): Tucson
Township/Range(s): T11S, R11E
USGS Quad(s): MARANA

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

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

Arizona Game and Fish Department
Project ID: HGIS-15253

project_report_sec_grier_sanders_48765_50263.pdf
Review Date: 1/5/2022 12:40:08 PM

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1A
Empidonax traillii	Willow Flycatcher	PS				
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1A
Glaucidium brasilianum cactorum	Cactus Ferruginous Pygmy-owl	PT	S	S		1B
Heloderma suspectum	Gila Monster					1A
Sigmodon ochrognathus	Yellow-nosed Cotton Rat	SC				1C

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

No Special Areas Detected
No special areas were detected within the project vicinity.

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
Anaxyrus retiformis	Sonoran Green Toad			S		1B
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Botaurus lentiginosus	American Bittern					1B
Buteo regalis	Ferruginous Hawk	SC		S		1B
Buteo swainsoni	Swainson's Hawk					1C
Calypte costae	Costa's Hummingbird					1C
Chilomeniscus stramineus	Variable Sandsnake					1B
Chionactis annulata	Resplendent Shovel-nosed Snake	SC				1C
Cistothorus palustris	Marsh Wren					1C
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
Empidonax wrightii	Gray Flycatcher					1C
Euderma maculatum	Spotted Bat	SC	S	S		1B
Eumops perotis californicus	Greater Western Bonneted Bat	SC		S		1B
Glaucidium brasilianum cactorum	Cactus Ferruginous Pygmy-owl	PT	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

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

Arizona Game and Fish Department
Project ID: HGIS-15253

project_report_sec_grier_sanders_48765_50263.pdf
Review Date: 1/5/2022 12:40:08 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
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		1B
Lasiurus blossevillii	Western Red Bat		S			1B
Lasiurus xanthinus	Western Yellow Bat		S			1B
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
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 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
Passerculus sandwichensis	Savannah Sparrow					1B
Perognathus longimembris	Little Pocket Mouse	No Status				1B
Phrynosoma goodei	Goode's Horned Lizard					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
Sturnella magna	Eastern Meadowlark					1C
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B
Toxostoma lecontei	LeConte's Thrasher			S		1B
Troglodytes pacificus	Pacific Wren					1B
Vireo bellii arizonae	Arizona Bell's Vireo					1B
Vulpes macrotis	Kit Fox	No Status				1B

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

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					

Page 10 of 11

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

Arizona Game and Fish Department
Project ID: HGIS-15253

project_report_sec_grier_sanders_48765_50263.pdf
Review Date: 1/5/2022 12:40:08 PM

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

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Development Within Municipalities (Urban Growth), Commercial/industrial (mall) and associated infrastructure, New construction

Project Type Recommendations:
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.

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

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 **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

HDMS records indicate that **Western Burrowing Owls** have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at:
https://www.azgfd.com/wildlife/speciesofgreatestconservneed/burrowingowlmanagement/.

Page 11 of 11

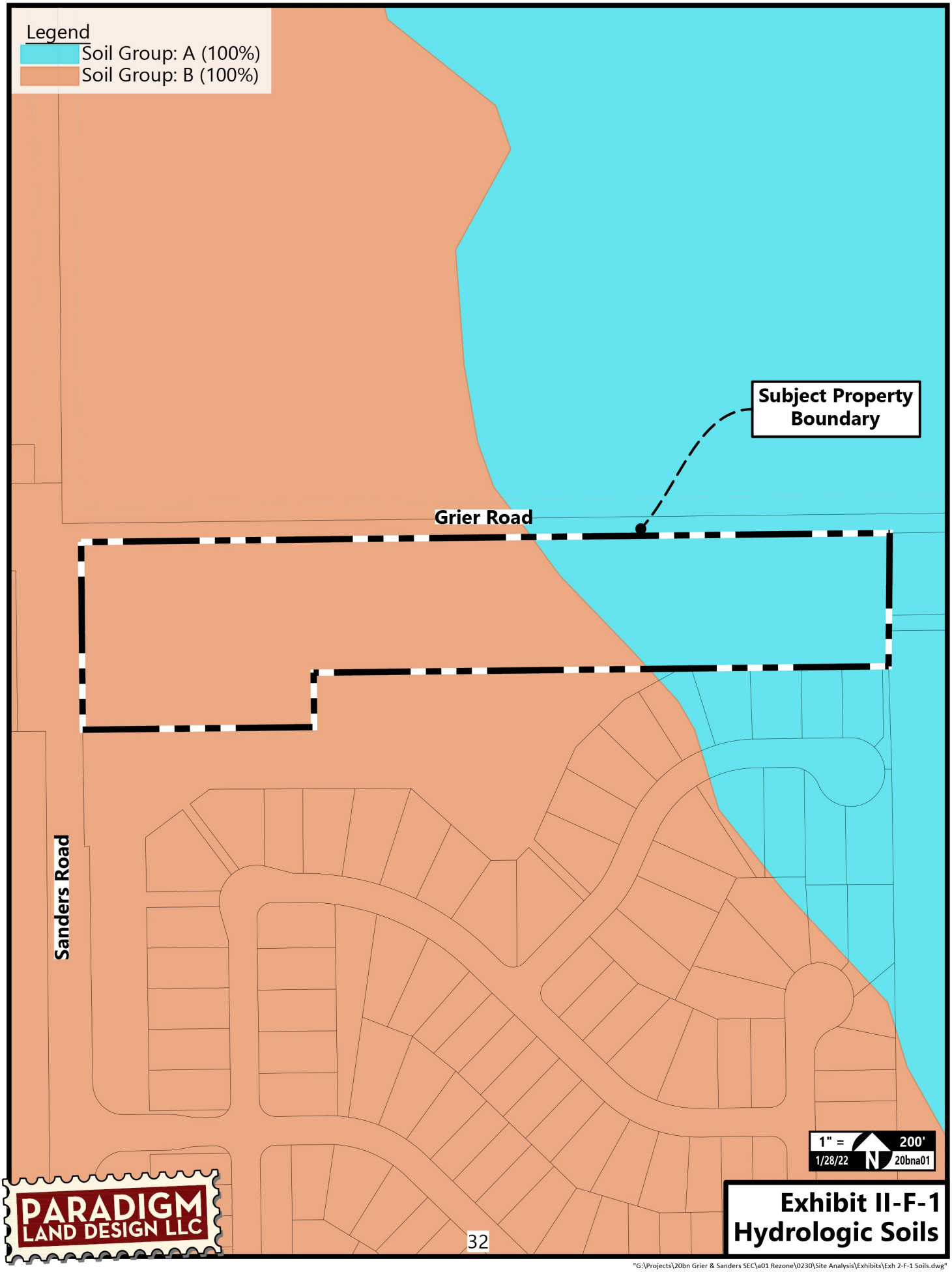
F. SOILS AND GEOLOGY

1. Soils

   Soils in the vicinity of this development are classified by the U.S. Natural Resources Conservation Service (NRCS) as 100% "Soil Group A" (Vinton-anthony sandy loams), and 100% "Soil Group B" (Gila sandy loam and Gila loam, 0 to 1 percent slopes). A detailed geotechnical investigation will be performed prior to development. See Exhibit II-F-1: Hydrologic Soils.

2. Geology

   The Property lies within the Santa Cruz River basin valley. According to the Arizona Geological Survey's online Geologic Map of Arizona (data.azgs.az.gov/geologic-map-of-arizona/) the Property's geology is described as "Quaternary Surficial deposits, undivided (0-2 Ma): Unconsolidated to strongly consolidated alluvial and eolian deposits. This unit includes coarse, poorly sorted alluvial fan and terrace deposits on middle and upper piedmonts and along large drainages; sand, silt and clay on alluvial plains and playas; and wind-blown sand deposits."



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G. VIEWSHEDS

1. Viewsheds from Adjacent Properties

   Primary views from the site are of the Tortolita Mountains and Catalina Mountains to the east, the Tucson Mountains to the south, and Picacho Peak to the north. Due to the distance to these mountain ranges, and the extremely flat nature of the Property and the surrounding areas, the views are minimal. Development of the Property will not block these views for existing residents in the area. See Exhibit II-G-1: Viewsheds and Exhibit II-G-2: Viewshed Photographs.



View to the Southeast Across the Property Toward the Tucson Mountains

2. Views which may be Blocked by the Proposed Development

   None.

3. Site Visibility

   Due to the lack of existing vegetation and the relatively even and flat nature of the topography, views into and across the Property are excellent and have only minor sight restrictions across the eastern portion of the property.

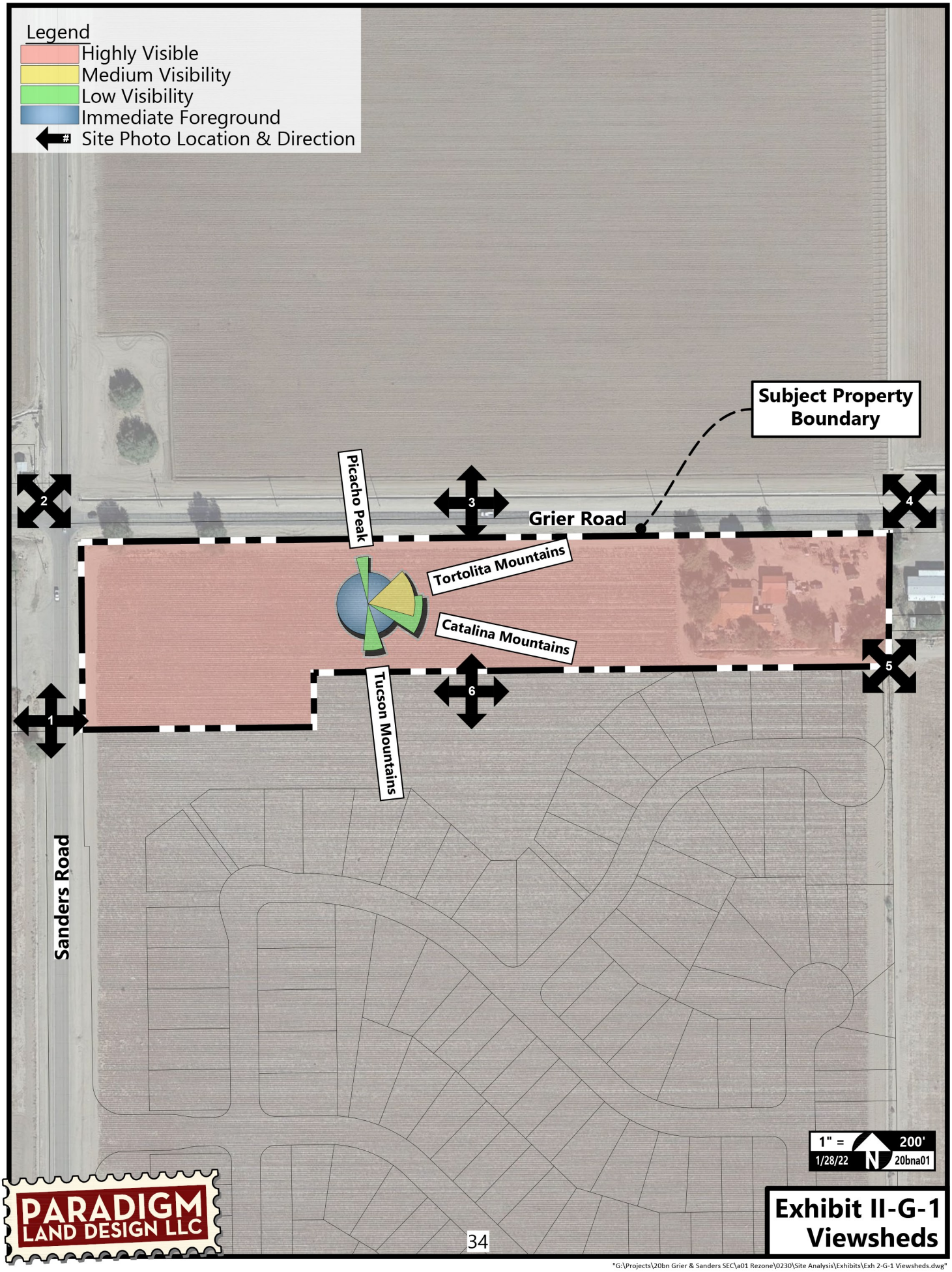

Legend
Highly Visible
Medium Visibility
Low Visibility
Immediate Foreground
Site Photo Location & Direction
Subject Property Boundary
Grier Road
Picacho Peak
Tortolita Mountains
Catalina Mountains
Tucson Mountains
Sanders Road
1
2
3
4
5
6
1" = 200'
1/28/22
N
20bna01
PARADIGM LAND DESIGN LLC
Exhibit II-G-1
Viewsheds
"G:\Projects\20bn Grier & Sanders SEC\a01 Rezone\0230\Site Analysis\Exhibits\Exh 2-G-1 Viewsheds.dwg"

Exhibit II-G-2: Viewshed Photographs

Photo Location #1: Looking North along Sanders Road and the Western Boundary of the Property



Photo Location #1: Looking East across the Southern Portion of the Property



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

Photo Location #1: Looking South away from the Property along Sanders Road



Photo Location #1: Looking West away from the Property



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

Photo Location #2: Looking Northeast from the Intersection of Grier Road and Sanders Road near the Northwest Corner of the Property



Photo Location #2: Looking Southeast into the Property from the Intersection of Grier Road and Sanders Road



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

Photo Location #2: Looking Southwest from the Intersection of Grier Road and Sanders Road near the Northwest Corner of the Property



Photo Location #2: Looking Northwest from the Intersection of Grier Road and Sanders Road near the Northwest Corner of the Property



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

Photo Location #3: Looking North away from the Property



Photo Location #3: Looking East along the Northern Boundary of the Property and Grier Road



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

Photo Location #3: Looking South across the Property towards the Tucson Mountains



Photo Location #3: Looking West along the Northern Boundary of the Property and Grier Road



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

Photo Location #4: Looking Northeast away from the Property at the Northeast Corner of the Property



Photo Location #4: Looking Southeast at the Northeast Corner of the Property



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

Photo Location #4: Looking Southwest into the Property at the Northeast Corner of the Property, these are the Existing Residences Onsite



Photo Location #4: Looking Northwest away from the Property at the Northeast Corner of the Property



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

Photo Location #5: Looking Northeast from the Southeast Corner of the Property



Photo Location #5: Looking Southeast from the Southeast Corner of the Property



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

Photo Location #5: Looking Southwest into the Future Village at Barnett Subdivision from the Southeast Corner of the Property



Photo Location #5: Looking Northwest into the Property from the Southeast Corner of the Property



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

Photo Location #6: Looking North across the Property from the Middle of the Southern Property Line



Photo Location #6: Looking East along the Southern Boundary of Property



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

Photo Location #6: Looking South away from the Property from the Middle of the Southern Property Line

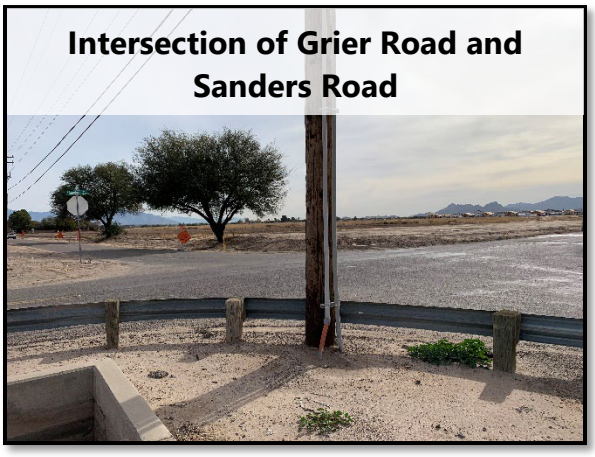


Photo Location #6: Looking West along the Southern Boundary of the Property



H. TRAFFIC

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



No new streets are being proposed as part of this development. The site is directly adjacent to Grier Road and Sanders Road, both of which are arterial streets. The 2045 P.A.G. Regional Mobility and Accessibility Plan proposes to widen Marana Road to a 4-lane roadway, with multi-use lanes and sidewalks from Trico Road to Interstate-10. It also proposes to widen Moore Road to a 4-lane divided roadway with bike lanes and sidewalks from Sanders Road to Adonis Road. Both projects are within a mile of this Property, and the existing arterial roadway system has ample capacity to support this project.

The Town of Marana plans to extend Tangerine Farms Road from its existing terminus north to the Marana Road traffic interchange.

Please refer to Exhibit II-H-1: Roadway Network.

2. Nearby Arterial Streets

All the traffic generated by this project will be accommodated by Grier Road and Sanders Road. An analysis of capacity has been prepared by M Esparza Engineering has been submitted as a standalone report.

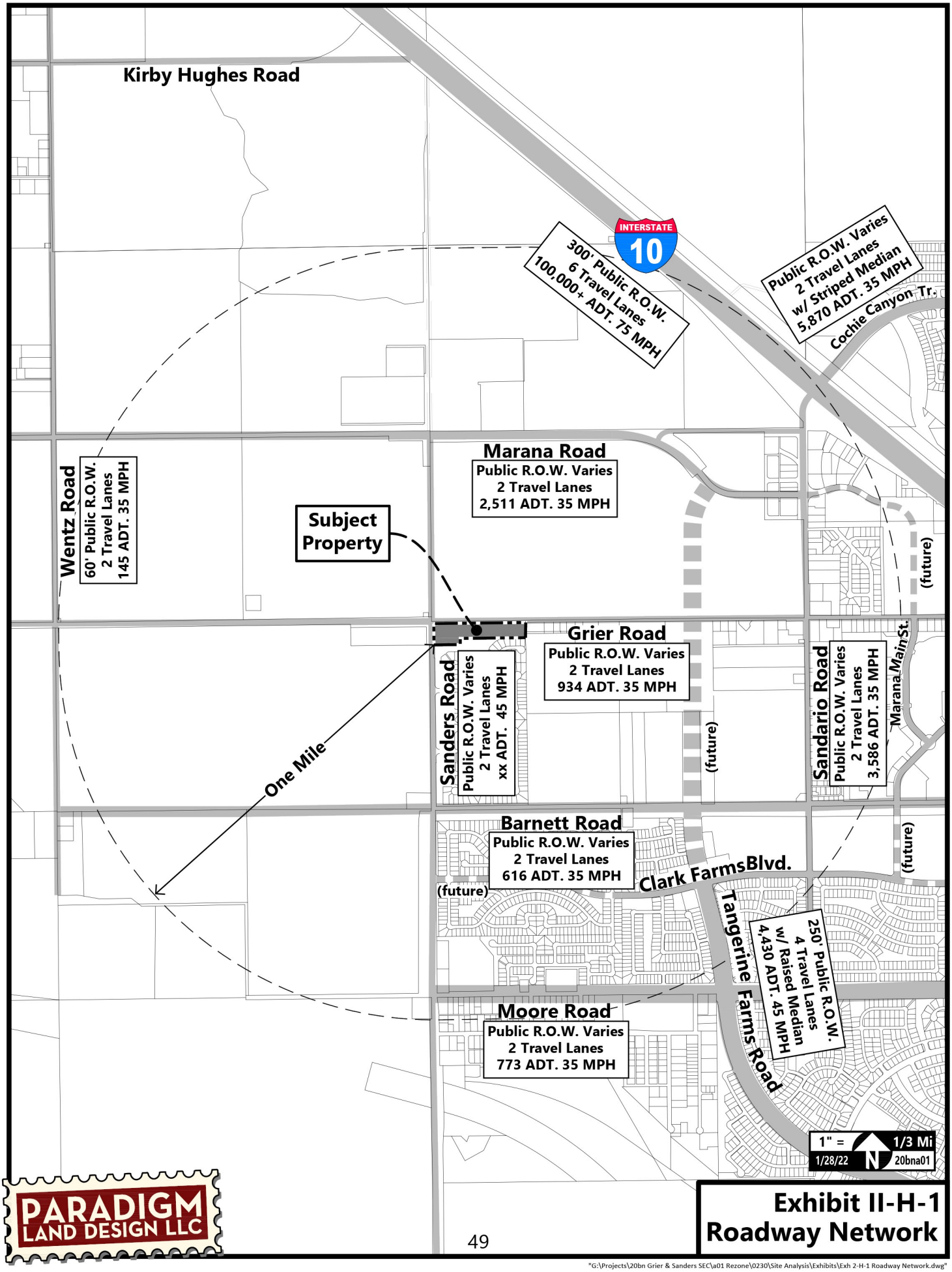
Roadway Name	Planned Right-of-Way Width	Exist. Lanes	Median Type	Speed Limit	General Plan Designation
Grier Road	150′	2	None	35 mph	Existing Arterial
Sanders Road	250′	2	None	45 mph	Existing Arterial
Barnett Road	65′+	2	None	35 mph	None
Marana Road	250′	2	None	45 mph	Existing Arterial
Moore Road	150′ – 250′	2	None	35 mph	Existing Arterial
Interstate 10	Varies	6	Depressed	75 mph	Interstate

3. Nearby Arterial Intersections

There are four arterial intersections within one mile of the site that will carry traffic generated by this development. The unsignalized intersection of Grier Road and Sanders Road is directly adjacent to the northwest corner of the project site. The other arterial intersections include the intersection of Moore Road / Sanders Road to the south, Marana Road / Sanders Road to the north and the intersection of Marana Road / Sandario Road / Intersate-10 to the northeast. All of these intersections are unsignalized.

4. Nearby Bicycle / Pedestrian Ways

A paved multi-use path, sidewalks, and bike lanes are provided alongside Tangerine Farms Road. The Santa Cruz River Park multi-use path and trailhead are just over one mile to the south of the subject property.



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Exhibit II-H-1
Roadway Network

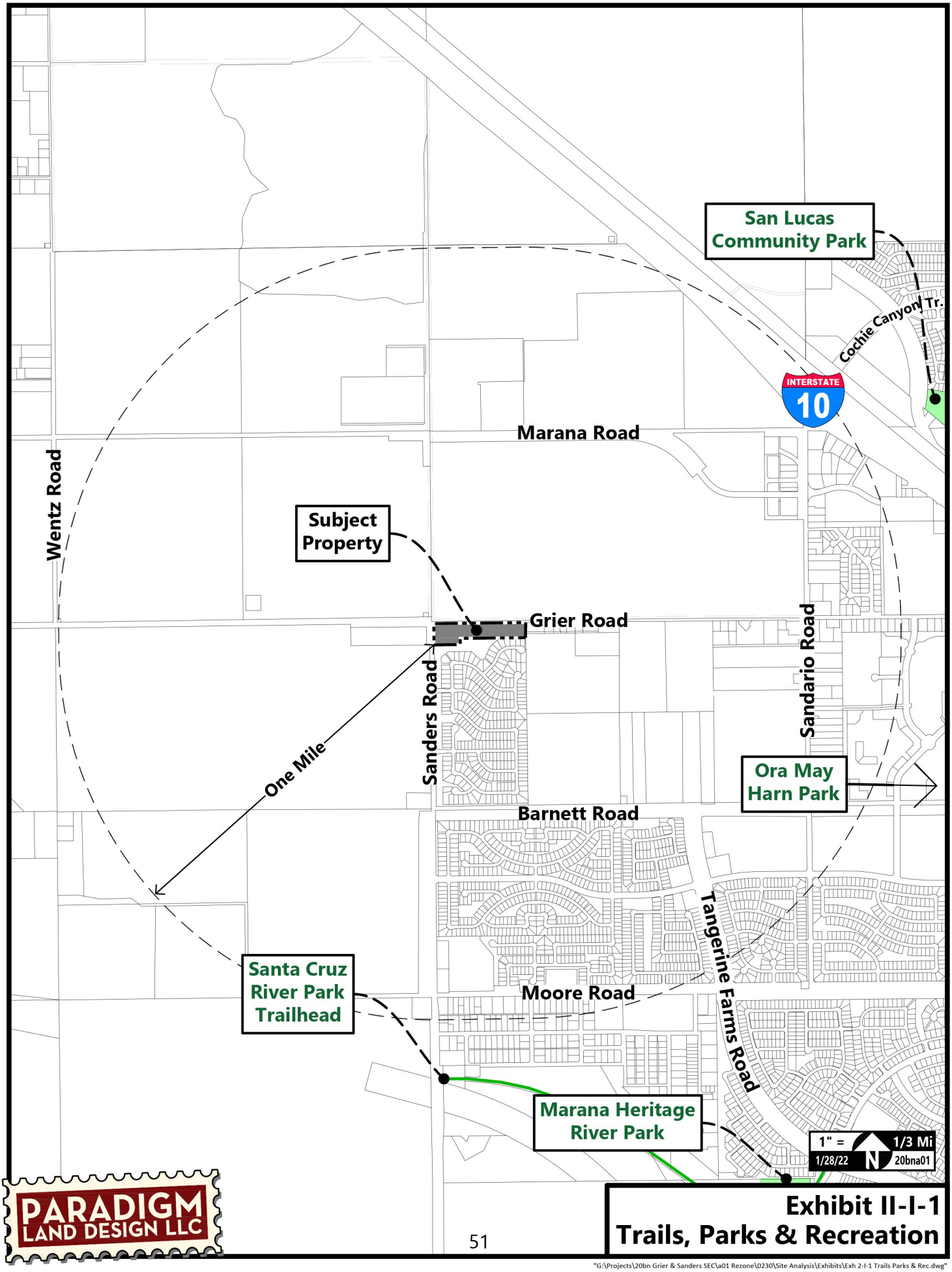
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I. RECREATION AND TRAILS

The Santa Cruz River Park and the starting trailhead is just over one mile to the south of this project, on Sanders Road. This trail system provides pedestrian connectivity to the town and the regions broader trail system. The Marana Heritage River Park is approximately a mile and a half to the southeast of the site and will be easily accessible via the Santa Cruz River Park multi-use path. This public park features a pavilion with a grill, paved multi-use path system that provides access to the Juan Bautista de Anza National Historic Trail and includes restrooms and 40 community garden plots. The Ora Mae Harn District Park is just over a mile and a half to the east and is easily accessible via Barnett Road. This public park features an adult softball field, basketball court, a lighted multi-purpose/soccer field, several ramadas with grills, open space grass areas, pickleball courts, a tennis court, a community center and pool with patios and restrooms, two playground areas, youth baseball and softball fields, and walking paths.

The paved multi-use path along Tangerine Farms Road provides pedestrian connectivity to the Santa Cruz River Park multi-use path and the Town's broader trail system.

See Exhibit II-I-1: Trails, Parks & Recreation.



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Exhibit II-I-1
Trails, Parks & Recreation

"G:\Projects\20bn Grier & Sanders SEC\a01 Rezone\0230\Site Analysis\Exhibits\Exh 2-I-1 Trails Parks & Rec.dwg"

J. CULTURAL, ARCHAEOLOGICAL, AND HISTORIC RESOURCES

1. Onsite Resources

   No cultural resources are known to exist on the subject property. If any cultural resources are located during construction, State and local antiquities laws and protocols will be followed.

2. Archaeological Records

   The Property was surveyed for cultural resources by Professional Archaeological Services of Tucson in January 2022. Nothing of significance was found and so it was determined that the development of this parcel could proceed without any further work.

   Please refer to Exhibit II-J-1: Professional Archaeological Services of Tucson Report Cover. The complete report was submitted to the Town under separate cover.

Exhibit II-J-1: Professional Archaeological Services of Tucson Report Cover

CULTURAL RESOURCES SURVEY OF GRIER/SANDERS SEC PROJECT IN OR NEAR MARANA, PIMA COUNTY, ARIZONA

Submitted to:

Paradigm Land Design LLC
7090 N. North Oracle Rd. #178-193
Tucson, AZ 85704

Submitted by

Professional Archaeological Services and Technologies
5036 Golder Ranch Dr.
Tucson, AZ 85739-4265

Prepared by
David V.M. Stephen Ph.D.
Principal Investigator
State Antiquities Permit No. 2022-006bl

P.A.S.T. Cultural Resources Report No. 212123
3/11/2022

K. EXISTING INFRASTRUCTURE AND PUBLIC FACILITIES

1. Sewer

   The Property is within the Marana Wastewater service area. An existing 15" sewer line runs along Sanders Road within a 30' public sewer easement along and within the western property boundary. The existing single-family residence on the property, and the homes to the east all use septic systems. See Exhibit II-K-1: Existing Wells & Septic Systems.

2. Water

   The Property is within the Marana Water intended service area. An existing 6" waterline runs along Grier Road and an 8" waterline runs along Sanders Road. No public or private wells are believed to exist within 100 feet of the Property. One well is believed to exist catty-corner from the site at the northwest corner of Grier Road and Sanders Road (55-604800). See Exhibit II-K-1: Existing Wells & Septic Systems and Exhibit III-D-2: Preliminary Development Plan.

3. Non-Potable Water

   The Property does not currently contain any Cortaro Marana Irrigation District (CMID) facilities, but as part of the Villages at Barnett project DR Horton is currently building a pipeline, headbox and gates that will allow CMID to deliver non-potable water to the Property near the east end.

4. Natural Gas

   The Property is located within the Southwest Gas service area.

5. Electric

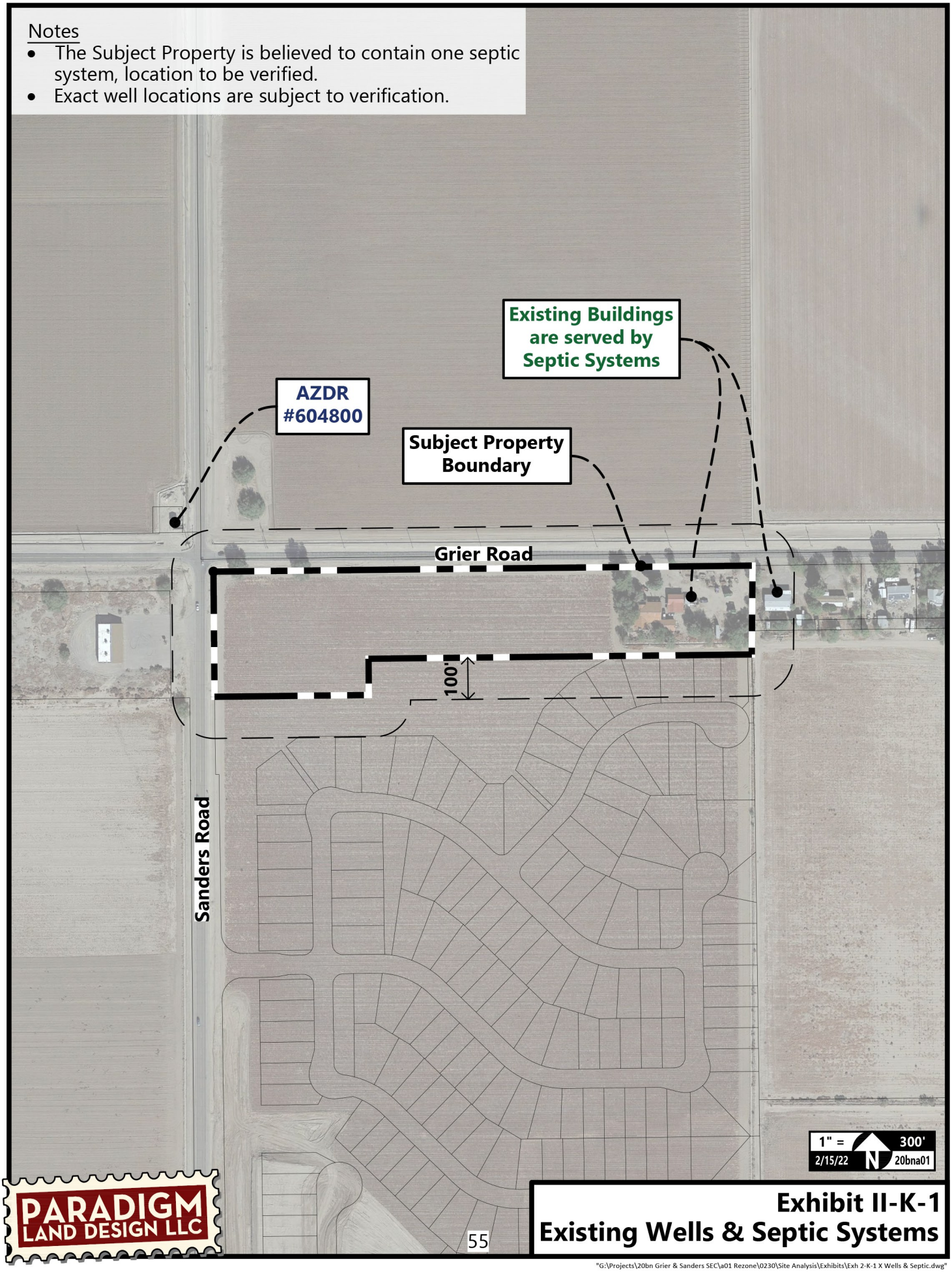
   The Property is located within the Tucson Electric Power service area.

6. Fire Service

   The property is within the Northwest Fire District.

7. Police Service

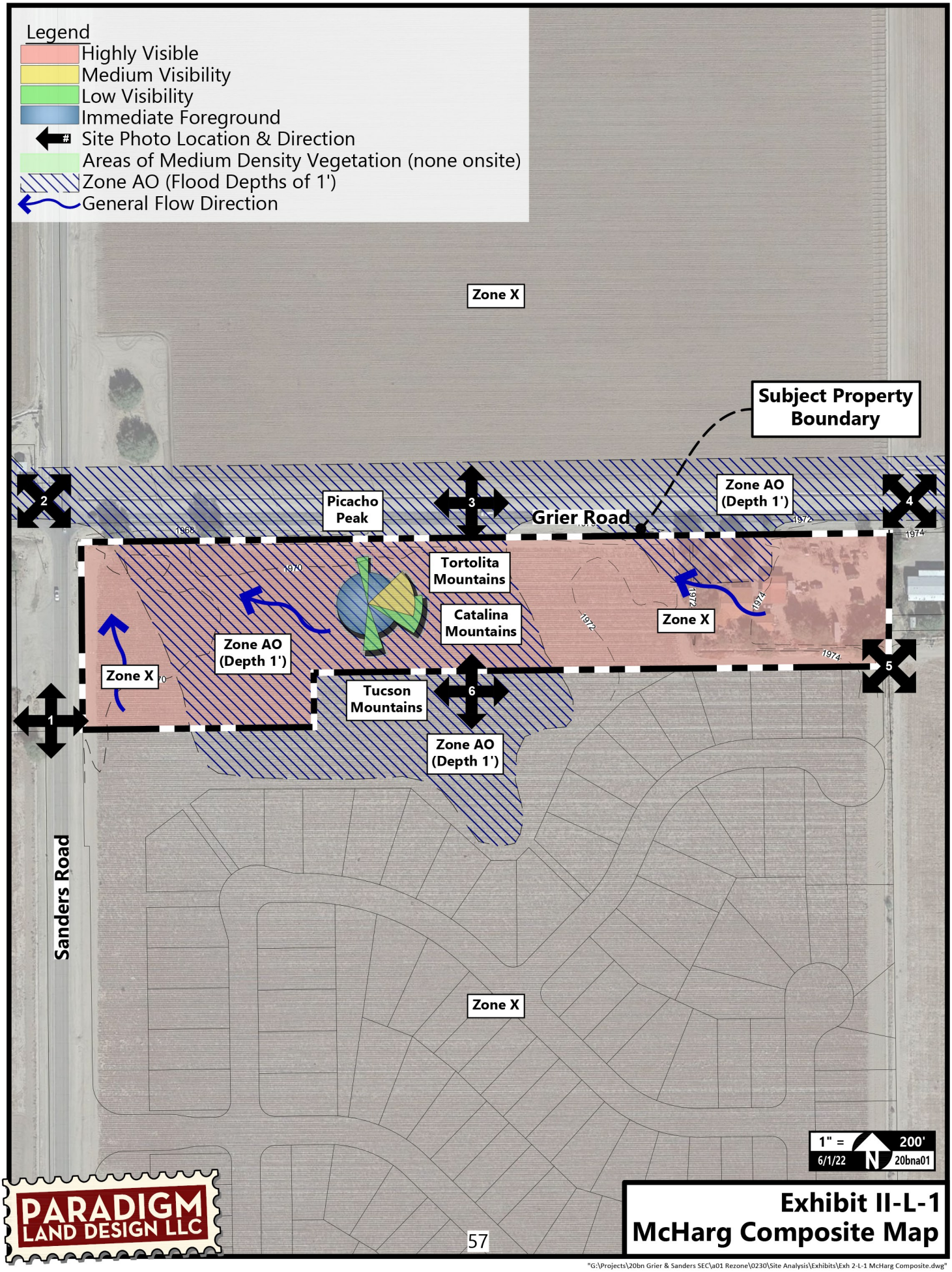
   The property is located within the Town of Marana Police service area.



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L. McHarg Composite Map

The following map combines individual elements detailed in prior sections to illustrate existing onsite constraints. The purpose of the McHarg Composite Map is to highlight areas that are available for development. As shown, constraints are minimal.



PARADIGM LAND DESIGN LLC

Exhibit II-L-1
McHarg Composite Map

"G:\Projects\20bn Grier & Sanders SEC\a01 Rezone\0230\Site Analysis\Exhibits\Exh 2-L-1 McHarg Composite.dwg"

III. LAND USE PROPOSAL

A. PURPOSE & INTENT

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

B. RELATIONSHIP TO TOWN OF MARANA ADOPTED PLANS

The Make Marana 2040 General Plan designates this property as Traditional Neighborhood, which supports land uses such as neighborhood scaled commercial development, religious institutions, small offices, and educational facilities. Being located at the intersection of two arterial roadways, Grier Road and Sanders Road, this site is an excellent candidate to provide commercial opportunities near Downtown Marana for neighboring and future nearby residences. This development will create employment openings and expand the tax base. Future buildings onsite will be energy efficient and landscape bufferyards will be provided to minimize impacts to existing and future homes nearby.

This development is within the "Central Growth Area" of the General Plan and will be compatible with the scale and intensity of existing and planned land uses around the subject property. Trees will be planted in the parking lot islands throughout the site to provide shade and reduce the urban heat island effect.

The Town of Marana Strategic Plan 4 encourages new commercial development, especially in North Marana. It also calls for all new developments to provide pedestrian connectivity. This project will meet both of those goals and will also support the Plan's call for diverse housing opportunities if developed residentially.

C. COMPATIBILITY TO ADJOINING DEVELOPMENT

With the Property's location adjacent to two major roadways and undeveloped farmland, this project will have minimal impact on nearby landowners. This project will provide landscape buffers around its entirety to reduce any negative views into the site from the existing residence to the east, or from the future residences to the south of the property. There will also be a variety of screen walls around the project to provide supplementary screening to and from the site. Additionally, canopy trees will be located within the parking areas of the site to help blend this development with the surrounding desert environment. Lighting on the site will be Dark Sky compliant and strategically located around the building and on light poles throughout the site and parking areas to ensure a safe lighting level.

D. LAND USE PROPOSAL

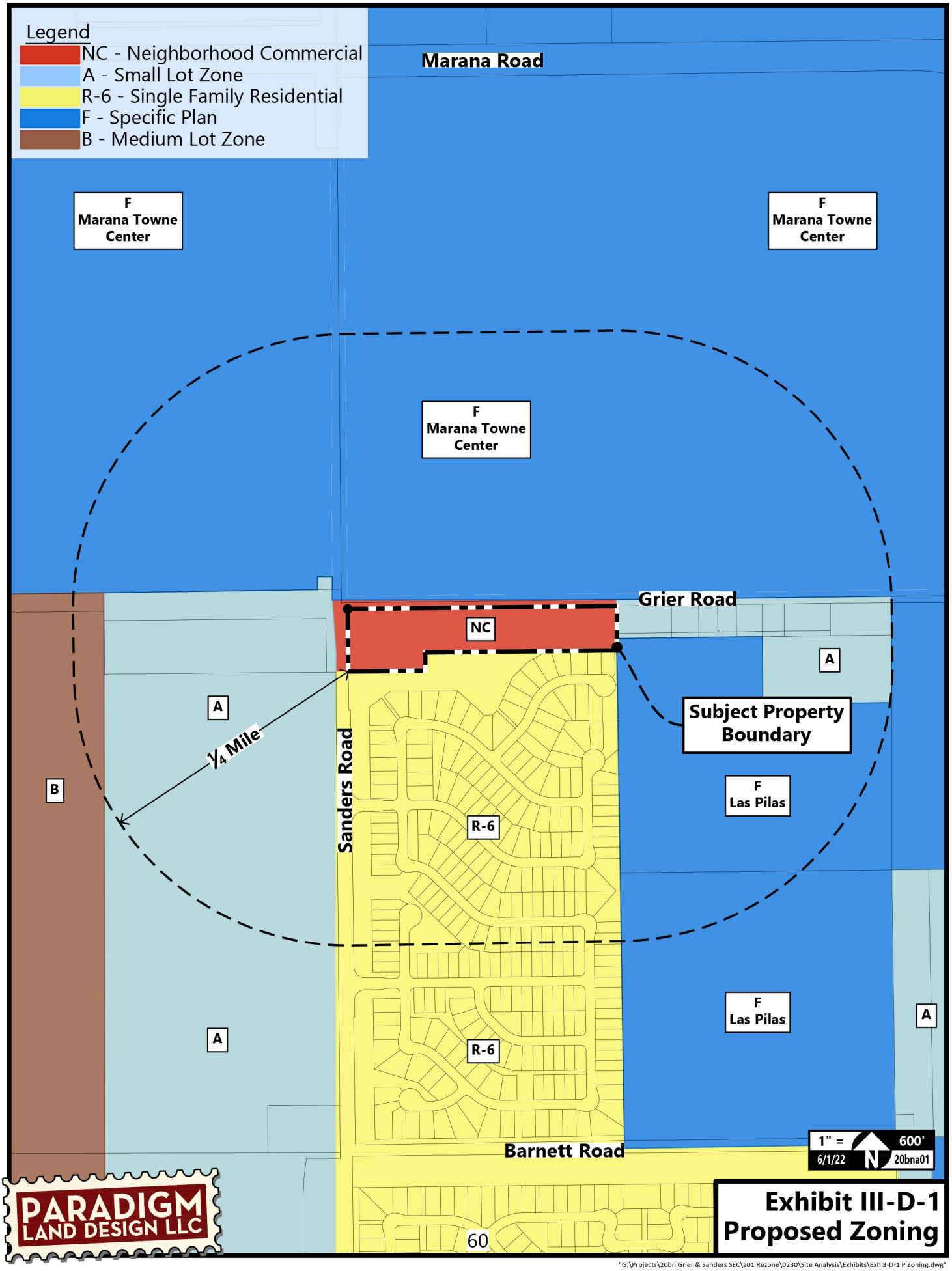
We are requesting to rezone this property from "A-Small Lot Zone" and "R-6 Single-Family Residential" to "NC-Neighborhood Commercial". See Exhibit III-D-1: Proposed Zoning. This will allow for the property to be developed with 5.5± acres of neighborhood-scale commercial area, and 1.5± acres of office space. Non-residential hours of operation will be determined by the tenants and will adhere to all applicable Marana regulations. The property owner will also work to attract multifamily residential developers to develop all or a portion of the site for residential purposes as allowed by the NC zone. See Exhibit III-D-2: Preliminary Development Plan (PDP). This project will adhere to all applicable development standards associated with the NC zoning requirements.

The proposed buildings will be architecturally compatible with nearby developments. The buildings will be constructed out of materials such as CMU split face block, wood framing with stucco exteriors, or other appropriate architectural treatments. The main exterior colors will be desert neutral and designed to blend in with surrounding structures and the desert environment.

Access to the site will be via several driveways along Grier Road and Sanders Road, as described in Section III-J and depicted schematically on Exhibit III-D-2. This development will be accessible to pedestrians, ADA compliant, and will provide access to all proposed buildings. Pavement striping will be provided in the parking areas to clearly delineate pedestrian access ways. A sidewalk will be provided along Grier Road and an asphalt multi-use path will be provided along Sanders Road. Parking spaces will be provided per Marana requirements. Refuse collection areas and loading zones will be properly screened. No new streets are proposed.

The development's common areas will be privately owned and maintained. Site lighting will be provided per Marana requirements to ensure safe pedestrian circulation without excessive lighting impacts to nearby residents. Landscaped borders will be provided around the entirety of the site to provide further visual mitigation and will utilize drought tolerant plant materials. All installed landscaping will be on an underground drip irrigation system until established. Vehicle headlight screen walls will be installed where necessary to block potential headlight impacts to nearby neighbors.

The existing house structures onsite will remain until their removal becomes necessary for development of the Property. A residential use is permitted in the NC zone as long as it complies with the development standards for R-3 zoning, which the existing structures do.


Legend
NC - Neighborhood Commercial
A - Small Lot Zone
R-6 - Single Family Residential
F - Specific Plan
B - Medium Lot Zone
Marana Road
F
Marana Towne
Center
F
Marana Towne
Center
F
Marana Towne
Center
Grier Road
NC
A
Subject Property
Boundary
A
¼ Mile
B
Sanders Road
R-6
F
Las Pilas
F
Las Pilas
A
A
R-6
Barnett Road
1" = 600'
6/1/22
N
20bna01
PARADIGM
LAND DESIGN LLC
Exhibit III-D-1
Proposed Zoning
60
"G:\Projects\20bn Grier & Sanders SEC\a01 Rezone\0230\Site Analysis\Exhibits\Exh 3-D-1 P Zoning.dwg"

Property Data

1. Property Area: 7.0± Ac.
2. Assessor Parcel(s): 217-41-010G
3. Existing Zoning: A - Small Lot Zone & R-6 Single-Family Residential (Town of Marana)
4. FEMA Floodplain: Zone 'AO' & Zone 'X'

Proposal Summary

1. Zoning: NC - Neighborhood Commercial
2. Building Height: 35' or less
3. Proposed Uses: Neighborhood-scale retail, office, and/or residential up to 10 homes per acre.

Legend

- Proposed Right-of-Way
- Proposed 5' Sidewalk
- Proposed 12' Asphalt Path
- Primary Site Access
- Internal Cross-Access

5' Sidewalk to be Constructed Along Grier Road

20' Building Setback

45' R.O.W. to be Dedicated

Min. 10' Landscape Buffer

Grier Road

1,293'±

Dwy. 2

Dwy. 3

Dwy. 4

Min. 10' Landscape Buffer

20' Building Setback

5' R.O.W. to be Dedicated

300'±

PAD #1 Commercial 1.9± Ac.

PAD #2 Commercial 0.7± Ac.

PAD #3 Commercial 0.7± Ac.

PAD #4 Commercial 0.7± Ac.

PAD #5 Offices 0.9± Ac.

250'

213'±

Min. 15' Landscape Buffer w/ 6' Wall

20' Building Setback

919'±

87'±

25' Building Setback

Min. 15' Landscape Buffer w/ 6' Wall

370'±

Min. 15' Landscape Buffer w/ 6' Wall

30' Existing Sewer Esmt.

Sanders Road

A Vehicular Connection to Sanders Road May or May Not be Allowed in the Future. This will be Determined at the Time of Development Plan Review

Villages at Barnett Subdivision (Under Construction)

Nicholas Court

Nicholas Drive

Samantha Lane

8" 15" 6" 8" 15" 15" 8"

1" = 150'
8/12/22 N 20bna01

PARADIGM LAND DESIGN LLC

61

Exhibit III-D-2
Preliminary Development Plan

"G:\Projects\20bn Grier & Sanders SEC\a01 Rezone\0230\Site Analysis\Exhibits\Exh 3-D-2 PDP.dwg"

E. GRADING CONCEPT

This Property has historically been used for agricultural purposes, and thus contains no hillsides, ridges, rock outcrops, or significant vegetation. Due to the relatively even and flat nature of the project site, buildings will only need to be raised enough to remove them from flood hazard. During development, the Property will be mass graded in order to provide the necessary slopes for stormwater drainage and wastewater flow.

F. POST-DEVELOPMENT HYDROLOGY

Conveyance of the offsite flows through the development will be provided via new constructed channels, culverts, and basins as necessary to meet Marana's drainage code requirements. To safeguard the site against scour and erosion potential channel banks and culvert ends will be stabilized with materials such as stones, riprap, soil cement or gunite to control erosion.

The large size of the offsite watershed results in a time lag between onsite and offsite time to peak flows. Drainage basins and other onsite drainage facilities will ensure the attenuation of increased site runoff across the downstream property boundary to avoid adverse drainage impacts to upstream or downstream properties. Post-development discharges flowing onto the Property will remain the same as under pre-development conditions.

All building pads will be designed to be a minimum of one foot above adjacent 100-year flood elevations.

G. VEGETATION & LANDSCAPING

The Marana Land Development Code, Environmental Resource Preservation, Native Plant and Landscape Requirements, allow for this type of commercial development. Having been subject to agricultural use for many years, this Property has limited native vegetation onsite. Existing vegetation onsite will be inventoried and any plant material that meets Marana's transplant requirements will be transplanted onsite. Native plants will be reintroduced throughout the project in accordance with the Town's landscape design guidelines. A landscape plan will be submitted at the time of development plan review.

Landscaped common areas will be utilized to help manage stormwater runoff and will be planted with native drought tolerant plant material. Additional landscaping will be installed throughout the site and around the perimeter of the property to meet Marana's perimeter landscape bufferyard standards. All installed landscaping will be drought tolerant per Marana 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. If the project is developed for non-residential uses a 6-foot tall masonry wall will be installed along the southern and eastern property boundaries to provide additional screening for nearby neighbors.

H. WILDLIFE

There are no primary wildlife corridors that run through the property.

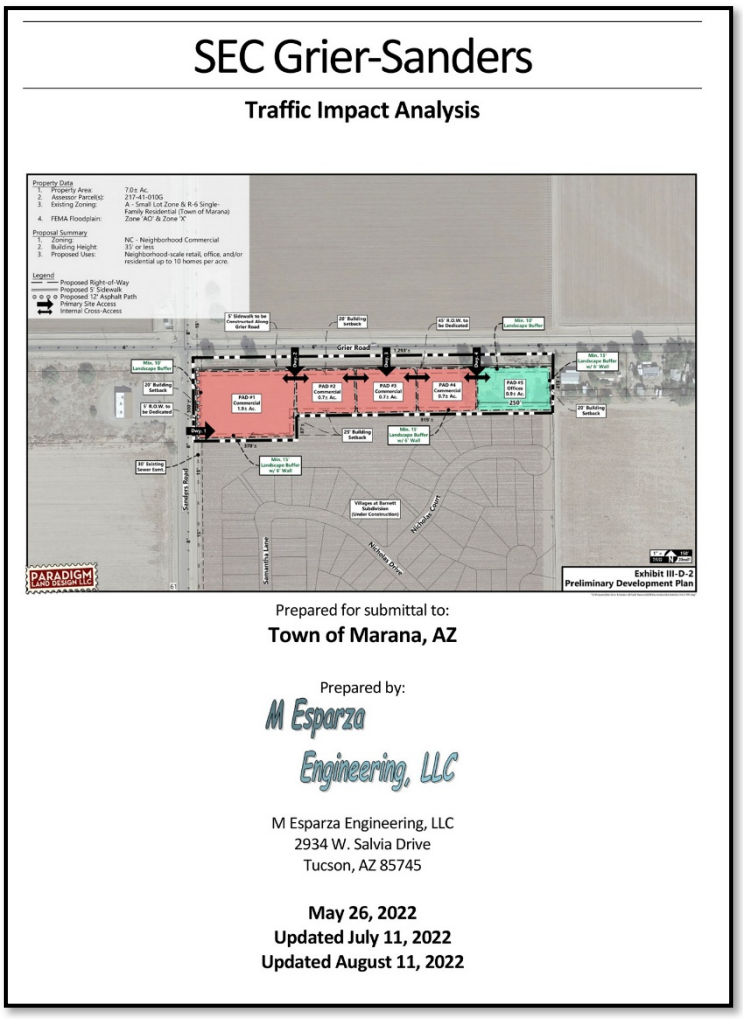
The Arizona Game & Fish Department is responsible for enforcing any wildlife regulations. It is recommended that the developer contact them for guidance prior to the start of construction.

I. VIEWSHEDS

Extraordinary views are not available from or across the property due to existing, relatively flat topography coupled with the distance to surrounding mountain ranges. However, perimeter buffer areas will help mitigate the project's minimal impacts to surrounding viewsheds.

J. TRAFFIC

When constructed, this project will warrant installation of three offsite turn lanes as described below. At the time of development, the project will dedicate an additional 45' of right-of-way along Grier Road and an additional 5' of right-of-way along Sanders Road. Access into the site will come directly from Grier Road and Sanders Road at locations deemed appropriate to provide safe ingress and egress and cross-access will be provided between the proposed pads. No streets are being proposed within this development. Only access lanes and parking area access lanes are proposed, which will be private. This project is expected to generate approximately 760 total daily weekday trips (380 inbound and 380 outbound), with the peak hour total just under 200 trips.


SEC Grier-Sanders

Traffic Impact Analysis

Exhibit III-D-2
Preliminary Development Plan

Prepared for submittal to:
Town of Marana, AZ

Prepared by:
M Esparza Engineering, LLC

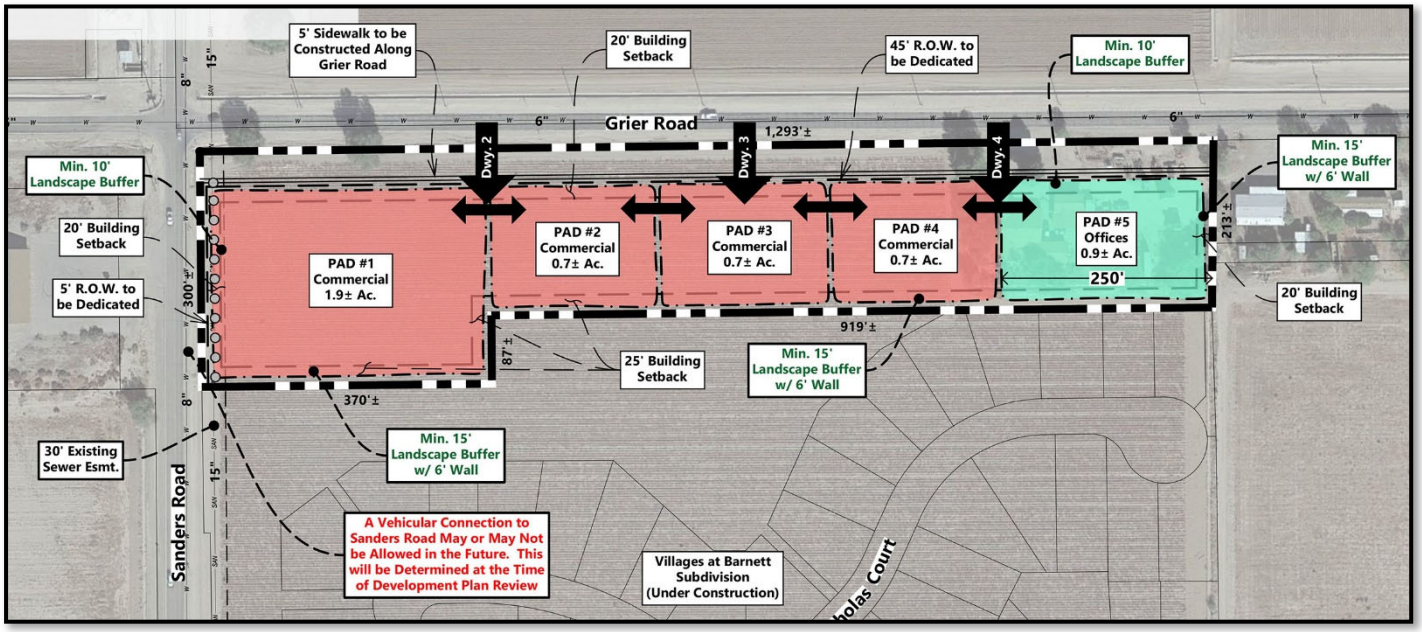
M Esparza Engineering, LLC
2934 W. Salvia Drive
Tucson, AZ 85745

May 26, 2022
Updated July 11, 2022
Updated August 11, 2022

A Traffic Impact Analysis by M Esparza Engineering has been submitted as a standalone report. The rezoning also proposes residential development of up to 10 homes per acre. Such a use, even if developed over the entire property, would only generate approximately 730 trips per day. The TIA models a completely retail / office development scenario because that produces a higher expected trip generation rate, and thus would have a greater impact on the surrounding street system. The TIA references the proposed access points

as Driveways 1 through 4, as shown on the map below, and provides the following recommendations:

1. Construct the project driveways to Town of Marana standards, with one ingress and one egress lane at the driveways.
2. The westbound and southbound left turn lanes at the Grier Road/Sanders Road intersection and the left turn lane on Grier Road at Driveway 2 are warranted based on Pima County turn lane warrant criteria found in the Pima County Subdivision and Development Street Standards. The westbound turn lane at Grier Road/Sanders Road is warranted under existing conditions, the southbound turn lane at the intersection is warranted under 2028 No Project conditions, and the turn lane at Driveway 2 is warranted with the project in 2028. However, the westbound turn lane at the Grier Road/Sanders Road intersection is not recommended because this approach is stop-controlled with few opposing vehicles, and all movements at the intersection will operate at LOS C with the project traffic through 2028. If the other turn lanes are constructed, the Grier Road turn lanes should be 110 feet long and the Sanders Road turn lane should be 150 feet with transition designed to Pima County left turn lane design standards. An opposing northbound left turn lane at the intersection should also be constructed with the southbound left turn lane. However, the turn lane warrant analysis should be reevaluated at the development plan stage.
3. Based on the thresholds for warranting a southbound left turn lane at the Grier/Sanders intersection, the Town should consider a "trigger" condition that the turn lane will be constructed when the project will generate 300 trips per day and if a follow-up TIS conducted for this project at the development stage finds that the turn lane would be warranted.
4. Sidewalks will be constructed along the frontages of the project site on Grier Road and Sanders Road.
5. Ensure that there is acceptable sight distance to and from the project entrances.
6. Roadway and subdivision design should conform to current Town of Marana standards.
7. All new traffic signs and markings must comply with the current Manual on Uniform Traffic Control Devices and local requirements.



K. PUBLIC UTILITIES

1. Sewer

   This development will connect to the existing Town of Marana 15" sewer line in Sanders Road. No additional offsite sewer improvements are anticipated to be necessary for this project.

2. Water

   Marana Water will serve this commercial development. The project will connect to the existing 6" waterline in Grier Road and/or the existing 8" waterline in Sanders Road. An offsite upsizing of Marana's public water system may be constructed by the developer if necessary to achieve adequate fire flow.

3. Non-Potable Water

   The Property does not currently contain any Cortaro Marana Irrigation District (CMID) facilities, but as part of the Villages at Barnett project DR Horton is currently building a pipeline, headbox and gates that will allow CMID to deliver non-potable water to the Property near the east end.

4. Electric

   The property will be served by the Tucson Electric Power Company.

5. Natural Gas

   Southwest Gas will supply natural gas services to this development.

6. Telecommunications

   The development is within the Century Link service area.

L. PUBLIC SERVICE IMPACTS

1. Police

   This project is within Marana's town limits, and law enforcement jurisdiction.

2. Fire

   This project will be protected by the Northwest Fire District.

3. Trash & Recycling

   The Town of Marana does not provide trash and recycling services. The business owners within this development will contract with a private solid waste pick-up provider.

4. Schools

   Being a commercial development, this section is not applicable.

5. Parks

   Being a commercial development, this section is not applicable.

M. RECREATION & TRAILS

Being a commercial development, this section is not applicable.

N. CULTURAL, ARCHAEOLOGICAL & HISTORIC RESOURCES

The Property was surveyed for cultural resources by Professional Archaeological Services of Tucson in January 2022. Nothing of significance was found and so it was determined that the development of this parcel could proceed without any further work.

Planning Commission Regular Meeting

Meeting Date: 08/31/2022

To: Planning Commission

From: Brian Varney, Senior Planner

Date: August 31, 2022

Strategic Plan Focus Area:
Not Applicable

Subject: **PCZ2109-001 SWC Tangerine and Thornydale Specific Plan;** A request for a recommendation to the Marana Town Council for approval to rezone approximately 50.92 acres of land from R-144 (Residential) to Specific Plan (SP). The property is generally located west of Thornydale Road and south of Tangerine Road within a portion of Section 6, Township 12S, Range 13E. (Brian D. Varney)

Discussion:

Request
Lazarus and Silvyn, PC is requesting a recommendation to the Marana Town Council for approval to rezone approximately 50.92 acres of land from R-144 (Residential) to "SP" Specific Plan. The proposed rezoning is accompanied by a request to amend the Marana General Plan Land Use category designation from Commercial to Master Plan Area.

Marana General Plan
The 2040 Marana General Plan designates the proposed rezoning area in the land use category of Commercial (C). A minor amendment to the General Plan will accompany this rezoning, changing the designation to Master Plan Area (MPA), as required when rezoning to Specific Plan (SP).

Surrounding Land Use and Site Characteristics
The rezoning area is bordered on the north by Tangerine Road, beyond that is the Tangerine / Thornydale Specific Plan area that is comprised of open space, existing commercial uses, and vacant, undeveloped land. East of the rezoning area is Thornydale Road and beyond that is vacant, Arizona State Trust Land located within Pima County that is zoned Suburban Ranch (SR). South and west of the rezoning area is the Sky Ranch Specific Plan area with 365 single-family residential lots. In addition, a 5.5 acre parcel, zoned Zone C - Large Lot Zone, is adjacent to the southern boundary of the rezoning area, containing a Tucson Water booster station facility.

The proposed rezoning area is comprised of three parcels that are currently vacant and largely undisturbed. The existing zoning of these parcels is R-144 (Residential). The topography of the site is relatively flat with an average cross-slope of approximately 2.4% sloping from the northeast to the southwest. The site is impacted by a few natural drainage channels that are generally shallow (1 to 2 feet in depth).

Proposed Land Use
Exhibit III.C.1: Land Use Concept of the site analysis document indicates a land use designation of Mixed Use (MU) throughout the rezoning area. The MU designation will accommodate commercial land uses typically allowed within the Town's Village Commercial (VC) zoning as well as single-family and multi-family residential uses. The Land Use Concept exhibit also indicates a proposed area of separation from the residences in the Sky

Ranch subdivision. A minimum separation of 300 feet is proposed between the property lines of existing Sky Ranch residences and any residential buildings proposed within the specific plan. A separation of 600' is proposed between the Sky Ranch residences and any commercial buildings proposed within the specific plan.

The site analysis includes three different conceptual site plans with three potential development scenarios within the rezoning area;
'CSP-1' depicts 30.4 acres of single-family residential use with a minimum of 30% designated as natural undisturbed open space, approximately 12.1 acres of multi-family residential land use and 7.8 acres of commercial use.
'CSP-2' depicts 32.3 acres of single-family residential with a minimum of 30% designated as natural undisturbed open space, 6.5 acres of assisted living use, and 11.5 acres of commercial/office use.
'CSP-3' depicts 50.3 acres of single-family residential use with a minimum of 30% designated as natural undisturbed open space.

In all three development scenarios, the most substantial drainage channel traversing the site is proposed to be maintained in its natural state and allow drainage to pass through an undisturbed channel. Town staff will require the submittal of a drainage study and will evaluate all on-site and off-site drainage in greater detail during the review of a preliminary plat or a development plan. All appropriate drainage infrastructure will be required to be constructed by the developer. In addition, regardless of which development scenario is ultimately developed, all development will be subject to the Town's Residential Design Standards and/or the Multi-Family, Commercial, and Industrial Design Standards. The recreational component of the project will be designed during the platting stage in accordance with the Town's recreational area standards including the Subdivision Recreational Area Design Manual.

Access and Circulation
Potential access points are proposed at two locations off of Thornydale Road and at three locations off of Tangerine Road, one of these being an emergency-only access. The ultimate location of all points of access will be dependent upon the development scenario selected. All development scenarios propose at least one primary access and one emergency access off of Tangerine Road, and at least one primary access off of Thornydale Road. The Town will require a sidewalk to be constructed to Town standards along the project's entire frontage on Thornydale Road. An asphalt shared-use path will be constructed, to Town standards, by the developer along the project's entire Tangerine Road frontage, connecting the path's current points of terminus at Camino de Manana and the Tangerine / Thornydale intersection. The Town of Marana Traffic Engineering Division has accepted the traffic study submitted for the rezoning area and further evaluation will occur at the time of development plan or preliminary plat submittal when a specific development scenario has been selected. On-site traffic circulation will also be evaluated at that time.

Utilities
Tucson Water will provide water service to future development within the rezoning area. A proposed plan identifying water use, fire flow requirements, and all on-site and off-site water facilities will be required. A water service agreement will be required, and all necessary on-site and off-site water infrastructure will be required to be constructed by the property owner / developer at the time of development. Water lines currently exist in the Sky Ranch subdivision as well as in Thornydale Road. Sewer service will be provided to the future development by Pima County Regional Wastewater Reclamation Department. The rezoning area lies within the service areas of Northwest Fire District, TRICO, Southwest Gas, Century Link, and Comcast.

Citizen Participation
The applicant held two, noticed neighborhood meetings and has engaged in discussion with two separate groups of neighbors, on the south and west borders of the proposed rezoning area.

Public Notification
This public hearing was appropriately noticed in The Daily Territorial, and all property owners within 300 feet of the boundary of the rezoning area were noticed by United States mail of the date, time, and topic of the public hearing. Additional notice was posted at various locations within the community.

Case Analysis Review Criteria
Pursuant to Town Code Section 17-3-1(D), the Planning Commission and Town Council shall consider the following questions, at a minimum, in reviewing an application for rezoning:

1. Any change of character in the area due to installation of public facilities, other zone changes, new growth trends, deterioration, and development;

   Based upon the requirements and conditions, the rezoning amendment does not appear to be detrimental to the character of the area due to installation of public facilities or any other rezoning changes.

2. The degree to which the proposed zoning will benefit the community; whether there will be benefits derived by the community, or area, by granting the proposed rezoning;

   With the acceptance of the recommended conditions, this rezoning will benefit the community by providing additional commercial opportunities and residential options.

3. Whether the proposed rezoning is compatible with the surrounding area or whether there will be adverse impacts on the capacity or safety of the portion of street network influenced by the rezoning, parking problems, or environmental impacts that the new use will generate such an excessive storm runoff, water, air, or noise pollution, excessive nighttime lighting, or other nuisances;

   Based on the recommended requirements and conditions, the rezoning amendment is compatible with the surrounding area and does not appear to be adversely impact the adjacent street network or generate such excessive storm runoff, water, air, or noise pollution, excessive nighttime lighting, or other nuisances

4. Whether the proposal conforms with and is in furtherance of the implementation of the goals and policies of the general plan, other adopted plans, and the goals, objectives and policies of the land development code, and other town regulations and guidelines, including goals and policies relating to economic development;

   With the acceptance of the recommended conditions and the approval of the accompanying minor General Plan Amendment from Commercial (C) to Master Plan Area (MPA), the rezoning amendment conforms with the goals and policies of the general plan, the land development code, and other town regulations and guidelines.

5. The zoning districts and existing land uses of the surrounding properties;

   Based on the recommended requirements and conditions, the rezoning amendment is compatible with the surrounding properties zoning and existing land use.

6. Whether the existing and proposed transportation infrastructure is suitable and adequate to serve the traffic anticipated to be generated by the proposed development;

   With the acceptance of the recommended conditions, the existing and proposed transportation infrastructure is suitable and adequate to serve the traffic anticipated to be generated by the proposed development

7. Whether the existing and proposed utility infrastructure, public facilities, and public services are suitable and adequate to serve the proposed rezoning area;

Based upon the rezoning requirements and conditions, there is adequate utility infrastructure, public facilities, and public services in the area to serve the proposed rezoning area

8. Whether the subject property is suitable for the uses to which it has been restricted under the existing zoning classification;

   Based upon the rezoning requirements and conditions, the subject property is suitable for the proposed uses.

9. Whether the rezoning is compatible with the adjacent neighborhood, especially residential neighborhood stability and character;

   Based upon the rezoning requirements and conditions, this rezoning amendment is compatible with the adjacent neighborhood in area stability and character;

10. If applicable, the length of time the subject property has remained vacant as zoned:

    The subject property has remained vacant since annexation in to the Town.

11. Whether there is an adequate supply of land available in the subject area and the surrounding community to accommodate the zoning and community needs:

    Based upon the rezoning amendment subject area location, there is an adequate supply of land available in the area and the surrounding community to accommodate the zoning and community needs.

Staff Recommendation:

This is a discretionary item for the Planning Commission to consider. Should the Commission choose to recommend approval of this item to the Town Council, staff recommends it be based upon the recommended findings and subject to the following conditions:

1. Compliance with all applicable provisions of the Town's codes and ordinances current at the time of any subsequent development including, but not limited to, requirements for public improvements and payment of application fees and applicable development impact fees.
2. Any preliminary plat or development plan for any portion of the Rezoning Area shall be in general conformance with the Conceptual Site Plan(s) presented to and approved by the Town Council as part of this Rezoning.
3. A master drainage study must be submitted by the Property Owners and accepted by the Town Engineer prior to Town approval of a preliminary plat or development plan for any portion of the Rezoning Area.
4. A water infrastructure and phasing plan (WIP) must be submitted by the Property Owners and accepted by Tucson Water (the "water utility") prior to approval of a preliminary plat or development plan for any portion of the Rezoning Area. The WIP shall identify all on-site and off-site water facilities needed to serve the proposed development. The WIP shall include all information required by the water provider, such as (but not limited to) analysis of water use and fire flow requirements, and well source, reservoir, and booster station infrastructure needed to serve the proposed development. If the water provider requires a water service agreement as a condition of service to the proposed development, the Property Owners must enter into a water service agreement with the water provider consistent with the accepted WIP.
5. A master sewer plan must be submitted by the Property Owners and accepted by Pima County Regional Wastewater Reclamation Department (the "wastewater utility") prior to the approval of any final plat or development plan for the Rezoning Area. The master sewer plan shall identify all on-site and off-site wastewater facilities needed to serve the proposed development, and shall include all information required by the wastewater utility. If the wastewater utility requires a sewer service agreement as a condition of service to the proposed development, the Property Owners must enter into a sewer service agreement

with the wastewater utility consistent with the accepted master sewer plan.

6. The Property Owners must design and construct any roadway, drainage, water, and wastewater improvements, and dedicate or acquire any property rights associated with those improvements, that the Town requires based on the data and findings of the accepted traffic impact analysis, the accepted master drainage study, the accepted WIP, the accepted master sewer plan, and other studies approved in connection with the approval of a preliminary plat or development plan for any portion of the Rezoning Area.
7. The final design of all streets and circulation facilities, including gated access (if applicable), must be accepted by the Northwest Fire District prior to Town Council consideration of a final plat for any portion of the Rezoning Area.
8. No approval, permit or authorization by the Town of Marana authorizes violation of any federal or state law or regulation or relieves the Property Owners from responsibility to ensure compliance with all applicable federal and state laws and regulations, including the Endangered Species Act and the Clean Water Act. The Property Owners should retain appropriate experts and consult appropriate federal and state agencies to determine any action necessary to assure compliance with applicable laws and regulations.
9. The Property Owners shall transfer to the water provider, by the appropriate Arizona Department of Water Resources form, those water rights being IGR, Type I or Type II for providing designation of assured water supply and water service to the Rezoning Area. If Type I or Type II is needed on the Rezoning Area, the water provider and the Property Owners shall arrive at an agreeable solution to the use of those water rights appurtenant to the affected portion of the Rezoning Area.
10. Prior to the issuance of any grading permits, the Property Owners shall submit evidence to the Town that all federal permit requirements have been met through the Corps of Engineers and the State Historic Preservation Office, if federal permits are required for the development of the Rezoning Area.
11. The Property Owners shall not cause any lot split of any kind without the written consent of the Town of Marana.
12. There shall be a minimum separation of 300 feet between the property lines of any existing residence located in the Sky Ranch subdivision and any residential buildings located within the Rezoning Area, and a minimum separation of 600 feet between the property lines of any existing residence located in the Sky Ranch subdivision and any commercial buildings located within the Rezoning Area .

Suggested Motion:

I move to recommend to the Town Council approval of PCZ2109-001, SWC Tangerine and Thornydale Specific Plan subject to the recommended conditions.

Attachments

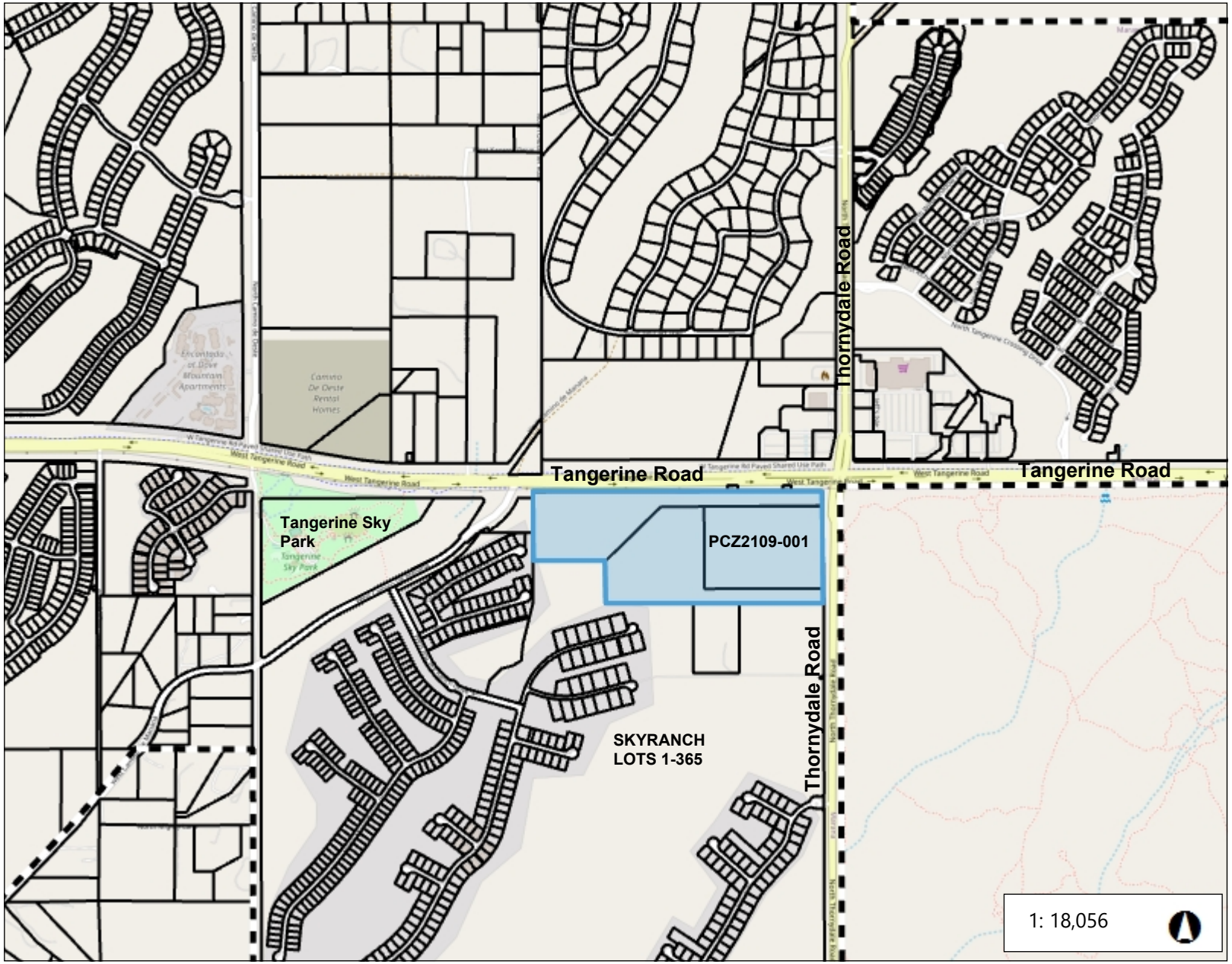
PCZ2109-001 SWCTT Map

PCZ2109-001 SWCTT App

PCZ2109-001 SWCTT Site Analysis

Town of Marana Planning

PCZ2109-001 SWC Tangerine Road and Thornydale Road Rezoning





Legend

- Marana Town Limits
- Parcel Labels
- Parcels (Black)

Notes

0.6 0 0.28 0.6 Miles

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Development Services / maranaplanning@maranaAZ.gov
11555 West Civic Center Drive / Marana, AZ 85653
Ph (520) 382-2600 / Fax (520) 382-2641 / maranaAZ.gov

PROJECT APPLICATION

APPLICATION TYPE

❑ Annexation	❑ Development Plan	❑ Development Plan Package	❑ General Plan Amendment
❑ Rezone	❑ Minor Land Division	❑ Significant Land Use Change	❑ Conditional Use Permit
☒ Specific Plan	❑ Landscape Plan	❑ Native Plant Plan/Exception	❑ SWPP
❑ Variance	❑ Hydraulic Model	❑ Sewer Capacity Assurance	❑ Sign Program
❑ Plat	❑ Improvement Plan	❑ Report (Type): _____	❑ Other: _____

PROJECT INFORMATION

Project Name: SWC Tangerine & Thornydale Specific Plan	
Description of Project: Specific Plan for mix of residential & commercial	Number of Lots: approx. 100 SFR
Parcel No.(s): 224-13-001J, -001L, -001K	Gross Area (Acres): 50.92 acres
Project Address: 11837, 11913 & 11971 N. Thornydale Rd.; 3851 W. Tangerine Rd.	
Ref. Project No.: (see SWC Tangerine & Thornydale GPA, submitted under separate cover)	

CONTACT INFORMATION

Owner: H3T Partners, LLC & Silverbell Properties, LLC	Contact Name: Kegan Tom		
Address: 2625 N. Silverbell Rd.	City: Tucson	State: AZ	Zip: 85745
Email: ktom@architecturecompany.net	Phone No.: (520) 622-4506		
Applicant: Lazarus & Silvyn, P.C.	Contact Name: Robin Large & Keri Silvyn		
Address: 5983 E. Grant Rd., Ste. 290	City: Tucson	State: AZ	Zip: 85712
Email: RLarge@LSLawAZ.com	Phone No.: (520) 207-4464		
Consultant/Engineer: Rick Engineering Company	Contact Name: Chuck Martin		
Address: 3945 E. Ft. Lowell Rd.	City: Tucson	State: AZ	Zip: 85712
Email: cmartin@rickengineering.com	Phone No.: (520) 795-1000		

OWNER/APPLICANT AUTHORIZATION

I hereby certify that the information set forth in this application are true and correct to the best of my knowledge and that I am either the owner of the property or that I have been authorized in writing by the owner to file this application. (If applicant is not the owner, attach written authorization from the owner.)

Robin Large		09/01/2021
Applicant Name (PRINT)	Signature	Date

FOR OFFICIAL USE ONLY

Project No._____ **Date Received**_____

Revision Date 03/29/2019

SWC TANGERINE & THORNYDALE SPECIFIC PLAN

4011 W. Tangerine Rd.
Marana, Arizona 85658

Project No.: PCZ2109-001
Revised July 2022

Law Offices of
Lazarus & Silvyn, P.C.



the architecture company

WestLand Resources, Inc.
Engineering and Environmental Consultants

RICK ENGINEERING COMPANY

Law Offices of Lazarus & Silvyn, P.C.

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I. Introduction

A. Introduction

The SWC Tangerine & Thornydale Specific Plan ("Specific Plan") proposes a mix of uses on the 50.92 acres of land (the "Property") located on the southwest corner of Tangerine and Thornydale Roads within the Town of Marana ("Town"). (*See Exhibit I.A: Regional Context.*) The Specific Plan provides an appropriate transition between the lower density residential uses to the south/west and the Tangerine Road corridor to the north by establishing a mix of uses, including mid- to higher-density residential and commercial. Tangerine Road is the east/west arterial roadway connecting Interstate 10 with Oracle Road passing through two towns and parts of unincorporated Pima County (the "County"). Tangerine Road has the largest right-of-way of any roadway within the Town, as identified on the Town's General Plan Future Circulation Map. The higher intensity mix of land uses proposed within this Specific Plan are suitable along this corridor.

Historically, this region of the Town was limited in its development potential due to its designation as Critical Habitat for the Cactus Ferruginous Pygmy Owl ("Pygmy Owl"). The Pygmy Owl was first listed Endangered by the U.S. Fish & Wildlife Service ("USFWS") in 1997. After a series of court challenges, the USFWS delisted the Pygmy Owl in 2006 as a threatened or endangered species but not before multiple master planned communities in the Town were designed to accommodate this Critical Habitat. In particular, the Sky Ranch Specific Plan ("Sky Ranch"), located south and west of the Property, was planned around the conservation of Pygmy Owl habitat, resulting in substantial preservation of natural open space. Other specific plans, including Tortolita Vistas, Saguaro Ranch and Dove Mountain were also designed in response to Critical Habitat constraints. The resulting development pattern is a series of similarly clustered residential neighborhoods with large swaths of natural open space, which has established a unique identity for Northern Marana.

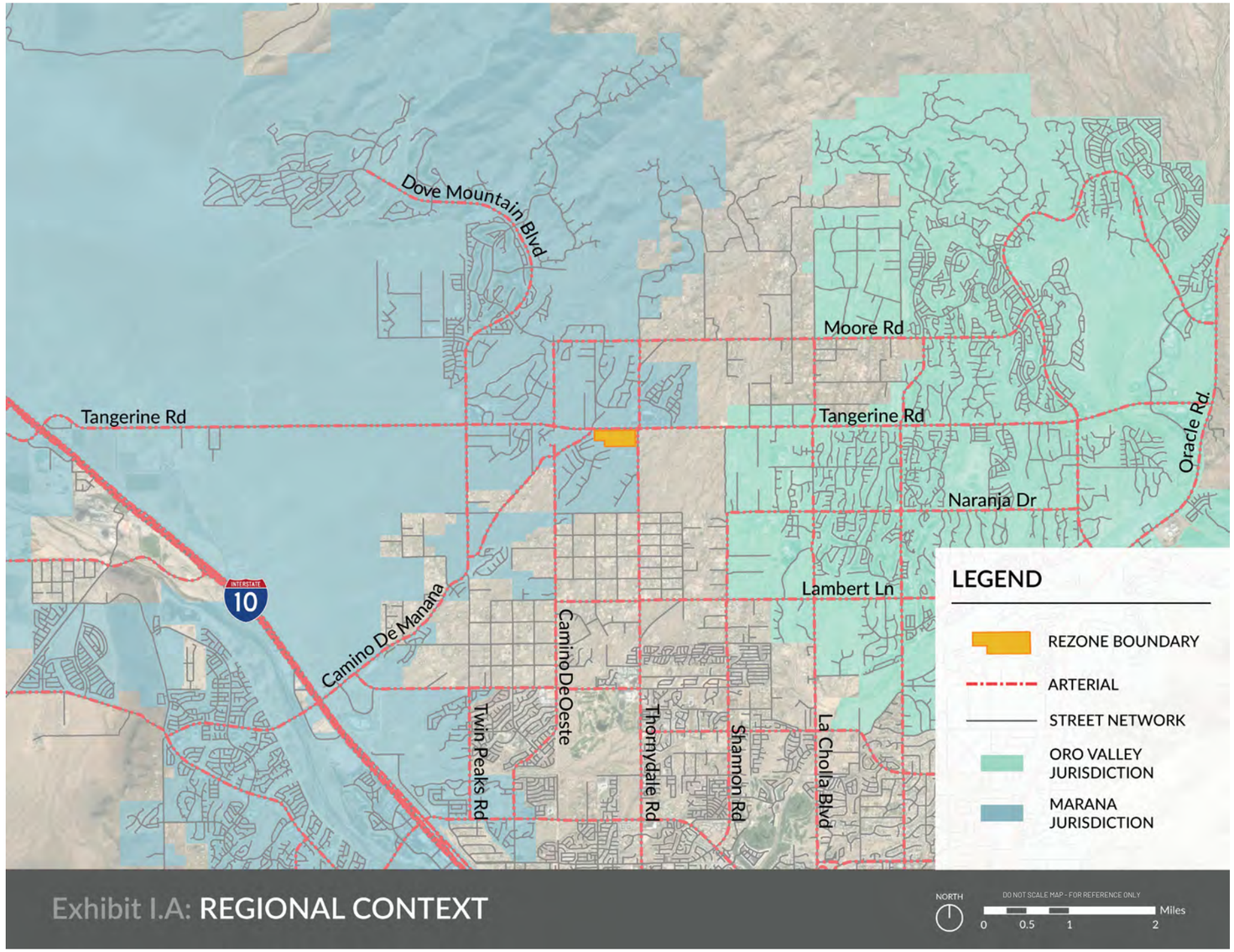


Exhibit I.A: REGIONAL CONTEXT

A. Introduction Cont.

One primary objective of this Specific Plan is to acknowledge an updated development pattern that supports growth adjacent to the Tangerine Road corridor while respecting the historic patterns of neighboring communities and using rational and sensitive transitions. The Specific Plan allows for a wide range of uses, including single- and multi-family residential, commercial and office uses—and any combination thereof. No commercial uses will be permitted within 600 feet of an existing Sky Ranch home, and single-family residential uses located on the west end of the Property adjacent to Sky Ranch will be sited with minimum 300-foot buffers between new and existing home property lines. The smaller lot residences, which may be developed at 3.5 residences per acre ("RAC"), will serve as a transition in intensity between the existing Sky Ranch homes and Tangerine Road to the north and more intense mixed-use development on the east toward the Tangerine/Thornydale intersection (the "Project").

This Specific Plan serves as both the land use proposal for the Project, as well as a minor amendment to the Town's General Plan, Make Marana 2040. Section I.B, on the following page, is the request and rationale to amend the Make Marana 2040 Future Land Use Map to indicate this Project is being developed as a Master Planned Area ("MPA"). Section II, Development Capability Analysis, includes an analysis of the Property's existing conditions. The Land Use Proposal (Section III) describes the proposed set of uses on the Property, and Section IV prescribes standards for the development of the Specific Plan. The Project's implementation plan and the Town's review process for development of the Project are included in Section V.

B. Make Marana 2040 General Plan Amendment

The Property, situated at the southwest intersection of two major arterial roadways, is located within the East Growth Area of the Town, which is "envisioned to become a diverse community of corporate businesses, commercial destinations, and residential uses compatibly integrated with, and that embody the rich natural environment." With Tangerine Road slated to be a major regional corridor connecting Marana to the Town of Oro Valley and growing portions of unincorporated Pima County, this Property is in a prime location to promote this vision.

The Property is currently designated as Commercial on the 2040 Future Land Use Map of the General Plan. Concurrent with this Specific Plan proposal is a request to amend the Property's land use designation to MPA. Make Marana 2040's *Table I.B: Major/Minor General Plan Amendment* indicates a change from Commercial to MPA qualifies as a minor amendment. The MPA designation "denotes areas that are guided by separate development approvals. These approvals establish the land uses, densities and intensities of development, and the character of the area." MPA is meant for properties planned as a single community with any mix of land uses that are appropriately planned and designed within the context of its environment. This Specific Plan is consistent with the intent of the MPA designation and the vision for the Town's East Growth Area, as well as the goals and policies of Make Marana 2040. The following policies from Make Marana 2040 are relevant and support this Specific Plan:

Table I.B: Major/Minor General Plan Amendment

From \ To	OS	RR	LDR	TN	C	E	MPA	A
OS	NA	Minor ≤ 5 ac Major > 5 ac	Minor ≤ 5 ac Major > 5 ac	Major	Major	Major	Minor ≤ 200 ac Major > 200 ac	Major
RR	Minor	NA	Minor	Major	Minor ≤ 10 ac* Major > 10 ac	Major		
LDR		Minor	NA	Minor ≤ 80 ac Major > 80 ac	Minor ≤ 15 ac* Major > 15 ac	Major		
TN		Minor	Minor	NA	Minor ≤ 20 ac* Major > 20 ac	Minor ≤ 15 ac Major > 15 ac	Minor	
C		Minor	Minor	Minor	NA	Minor		
E		Minor	Minor	Minor	Minor	NA		
MPA	Minor						NA	Major
A	Major							NA
TP	NA	Major						

*No amendment is required up to the amount permitted by right. See Table 2-2 Future Land Use Category Designations for permitted commercial acreage.

1. Built Environment

a. Land Use

Goal BE-2. Non-residential development is compatible with existing and planned residential areas

- **Policy BE 2-2.** Provide on-site transitional land use techniques including building orientation, site design, bufferyards, building height limitations, setbacks, and other methods to reduce impacts of non-residential uses on residential areas.

The Project has been designed with thoughtful transitions between new development and the adjacent Sky Ranch community. New homes within the Specific Plan will be sited at least 300 feet from an existing Sky Ranch home property line with intervening open space to provide ample buffering, and commercial uses will be located at least 600 feet from any existing Sky Ranch home property line. The Mixed-Use designation permits higher intensity uses, including multi-family residential and commercial uses along Tangerine frontage and the Tangerine/Thornydale intersection.

B. Make Marana 2040 General Plan Amendment Cont.

Goal BE-8. Mixed-use development in Marana provides quality areas of housing, commerce, and community interaction.

- **Policy BE 8-1**. Encourage mixed-use development proposals in appropriate locations, with the scale and intensity compatible with existing and planned uses in the area.

- **Policy BE 8-2.** Support and encourage mixed-use development in appropriate areas that reflect the following elements:

  - Integration of land use, transportation, infrastructure, and design elements into a cohesive, well-planned community

  - Accommodation of all modes of travel and connection to public areas through multi-modal circulation

  - Promotion and integration of walkability within land uses and site planning

  - Integration and location of residential, commercial, office, employment, transit, recreation, and open space within a walkable distance from one another

  - Policy BE 8-3. Support mixed-use projects in appropriate areas that promote walkability and livability through compact and integrated residential, commercial and employment areas.

As discussed in Subsection I.C, below, the Project is located along Tangerine Road, which is slated to be an employment corridor west of the Property. The Specific Plan is well-positioned to support the employment uses with housing options for employees and diverse commercial development all around the Tangerine/Thornydale intersection within walking distance of the residential uses.

Goal BE-9. Multi-family development in Marana is of high design quality and is supported by necessary infrastructure and community serving uses.

- **Policy BE 9-2**. Evaluate multi-family development during the development review process for appropriate landscaping, open space, and recreational uses that create a complete residential community.

- **Policy BE 9-3**. Provide access to multi-family residential development from either arterial streets or collector streets.

B. Make Marana 2040 General Plan Amendment Cont.

- **Policy BE 9-4.** Reduce the bulk and massing of multi-family buildings through orientation, façade articulation, roof plane variation, fenestration, and material and color variations.

Goal BE-11. Land use, transportation, and urban design in Marana are integrated in support of land and resource conservation, multi-modal transportation, active open spaces, and design innovation.

- **Policy BE 11-4.** Locate higher density residential uses, as well as mixed-use development, in suitable focal areas, such as Downtown, Ina Road, and Tangerine Road.

Multi-family residential development is permitted within the Specific Plan and is an ideal use near the Tangerine/Thornydale intersection. Any multi-family residential project within the Specific Plan will comply with the Town's Multi-Family, Commercial and Industrial Design Standards. All uses within the Specific Plan will be able to access the shared-use path along Tangerine Road, which also provides pedestrian/bicycle access to Tangerine Sky Park west of the Property.

b. Transportation

Goal BE-17. Marana has an efficient and safe transportation system connecting all modes of travel, serving all residents, and supporting economic development.

- **Policy BE 17-3.** Encourage mixed land uses that combine residential, commercial, and employment with access to transit, bicycle, and pedestrian improvements.

Goal BE-26. The bicycle system in Marana is safe, connects areas of community activity, and promotes recreation.

- **Policy BE 26-2**. Provide for enhanced bicycle features at major arterial streets and freeways, such as separating facilities from vehicular traffic, buffered bike lanes, HAWK signalized crossings, and median refuge areas.

- **Policy BE 26-5**. Create bikeways that increase and enhance connectivity to neighboring jurisdictions.

B. Make Marana 2040 General Plan Amendment Cont.

The Specific Plan is situated at a major arterial intersection and primed to take advantage of all current and future modes of transportation. Tangerine Road features a shared-use path along its southern right-of-way on either side of the Property connecting the Town with the Town of Oro Valley to the east. The path will be extended along the Property as part of this Project. This shared-use path also provides pedestrian/bicycle access to Tangerine Sky Community Park west of the Property.

c. Housing

Goal BE-27. Marana maintains a diverse housing stock that accommodates the various housing needs of all residents.

- **Policy BE 27-2**. Encourage a range of housing types, housing sizes, and lot sizes that foster a variety of options, such as detached single-family homes, attached single-family homes, and multi-family units that increase choices throughout the community.

- **Policy BE 27-3**. Promote development proposals for multi-family residential, mixed-use, and small lot residential areas that are compatible with the existing and planned land uses in the area.

- **Policy BE 27-4**. Encourage the development of apartments, garden homes, court homes, townhomes, condominiums, and attached single-family dwellings in appropriate locations to increase available housing options for price-sensitive rentals.

Goal BE-30. Neighborhoods in Marana have unique identities with diverse residential designs.

- **Policy BE 30-5**. Encourage new and innovative housing types that meet the evolving needs of Marana households, and expand housing choices in all neighborhoods.

- **Policy BE 26-5**. Create bikeways that increase and enhance connectivity to neighboring jurisdictions.

It has become increasingly apparent that the market is demanding more diverse housing options, including smaller lot sizes for single-family residences and more rental opportunities. In the last few years, many homebuilders have expanded their portfolios in response to market demands, designing their single-family detached homes to fit on smaller lots and are still able to ensure each home has a small amount of private patio and/or backyard space. Highly amenitized apartment complexes have also become increasingly popular, especially near employment centers. This Project provides opportunities for diverse housing options, and their development will be sensitive to nearby existing residences through the use of transitions and mitigation strategies.

B. Make Marana 2040 General Plan Amendment Cont.

2. People & Community

a. Recreation

Goal PC-20. Marana supports a healthy, active community through a high quality park and recreation network.

- **Policy PC 20-4.** Provide urban spaces that include recreational opportunities, walkways, or trails to serve the community.

Some residents are choosing smaller living and private outdoor spaces in exchange for what they deem to be quality-of-life features, including proximity to work or schools and access to commercial, entertainment, recreation or open space. This Project will feature onsite recreation areas in accordance with Town recreation requirements, and its location ensures access to community recreation areas and regional open space with the adjacent shared-use path and nearby Tangerine Sky Community Park.

3. Resources & Sustainability

a. Open Space

Goal RS-1. Marana's dedication to preserving the Sonoran Desert environment contributes to the Town's aesthetic character.

- **Policy RS 1-1**. Where possible, encourage developers to maintain open space, view corridors, and wildlife connectivity to ensure that development does not block wildlife crossings and their connecting corridors.

Some residents are choosing smaller living and private outdoor spaces in exchange for what they deem to be quality-of-life features, including proximity to work or schools and access to commercial, entertainment, recreation or open space. This Project will feature onsite recreation areas in accordance with Town recreation requirements, and its location ensures access to community recreation areas and regional open space with the adjacent shared-use path and nearby Tangerine Sky Community Park.

B. Make Marana 2040 General Plan Amendment Cont.

b. Environmental Planning

Goal RS-7. New developments are constructed in a manner that minimizes flooding.

- **Policy RS 7-3.** Work with developers to incorporate drainage facilities within their proposed development.
- **Policy RS 7-5.** Use detention basins for multiple purposes (recreation, landscape bufferyard, etc.) where practical and feasible.

Goal RS-8. Stormwater is efficiently and sustainably managed in a way that reduces flood risks and respects water quality.

- **Policy RS 8-2**. Preserve and protect primary natural drainage systems.

c. Conservation

Goal RS-11. Marana promotes the protection, conservation, and long-term sustainability of its distinct natural environment.

- **Policy RS 11-6**. Ensure that development has collective natural undisturbed open spaces and that they are maintained and managed properly by homeowners' associations or other entities.

The large wash on the Property will be maintained as open space and will also serve as a wildlife corridor, allowing wildlife movement between Sky Ranch to the south and the Tortolitas to the north via large culverts under Tangerine Road. These culverts (installed during Tangerine Road improvements) have established a natural drainage pattern through the Property that will be maintained. A series of dual-purpose basins will provide both retention/detention and opportunities for recreation throughout the Specific Plan. The quantity and characteristics of drainage flows leaving the Property will match existing conditions. A community or homeowners' association will be established to ensure this opens space is protected and maintained as an asset to the community.

C. Honoring Our Heritage. Heralding the Future.

The Town's Economic Development Strategy ("Strategy") highlights Tangerine Road as an employment corridor. While the mapped corridor extends from Interstate 10 to Dove Mountain west of the Property, the Specific Plan is situated to serve as an extension of this economic center. The Strategy focuses on attracting research and business park employment uses on campus-style centers with supporting commercial development around them, and the Specific Plan is well-positioned to provide this support.

The Project is positioned to contribute to the Town's economic development, and the key to supporting non-residential uses—and commercial uses in particular—is developing more rooftops. The Specific Plan will contain diverse housing opportunities for the employees of these centers, many of whom may be seeking an alternative to the traditional 6,000+ square-foot lots that dominate other Specific Plans along Tangerine Road. To support these residents, open space and recreation opportunities will be incorporated throughout the Specific Plan area, and community recreation areas will be accessible via regional trail connections.



II. Development Capability Inventory Analysis

A. Purpopse & Intent

The purpose of this Development Capability Analysis is to establish current site conditions, identify existing land uses in the area, and analyze the site's relevant strengths and weaknesses in preparation for the future development of the Property.

Per the Town of Marana application checklist for Specific Plans, this analysis includes:

- Existing land uses on and around the Property
- Topography and slope
- Hydrology and water resources
- Vegetation and wildlife habitats
- Soils and geology
- Viewsheds
- Traffic analysis
- Recreation and trails
- Cultural, archaeological and historic resources
- Existing infrastructure and public facilities

B. Existing Land Uses

1. Site Location

The Property is located at the eastern edge of the Town in the northeast portion of Section 06, Township 12 South, Range 13 East. The 50.92-acre Property is situated approximately 6 miles east of the Interstate-10 Highway at the southwest corner of Tangerine Road and Thornydale Road. (*See Exhibit II.B.1.a: Property Location*.)

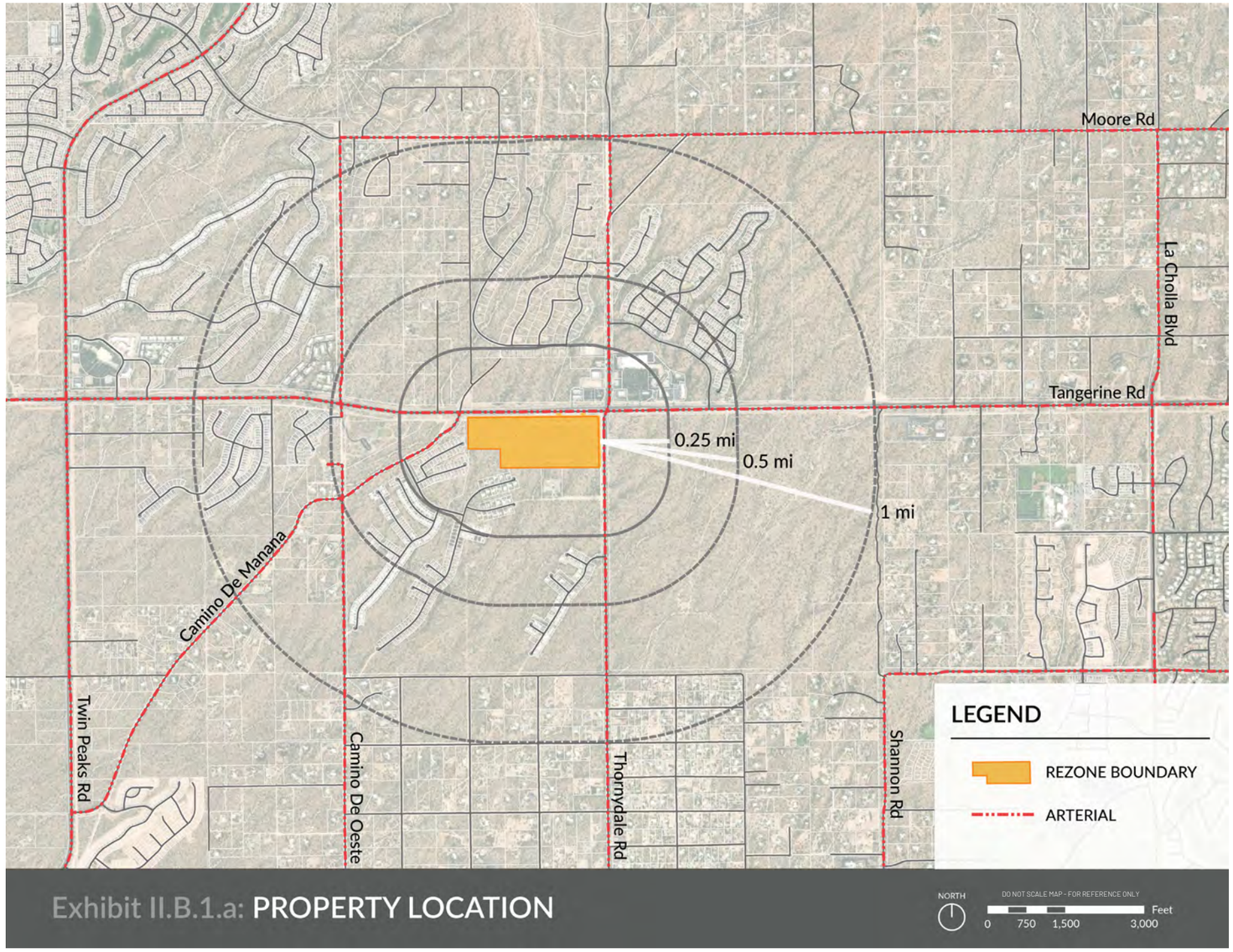


Exhibit II.B.1.a: **PROPERTY LOCATION**

B. Existing Land Uses Cont.

1. Site Location Cont.

The Property is comprised of three (3) separate parcels (Pima County Assessor parcel numbers 224-13-001J,-001K and-001L) with Tangerine Road to the north, Thornydale Road to the east, and the Sky Ranch Neighborhood to the west and south. (*See Exhibit II.B.1.b: Property Description*.) There are three (3) vacant parcels adjacent to the northern and eastern site boundaries owned by the Town extending into the Tangerine Road and Thornydale Road rights-of-way. There is one (1) parcel adjacent to the southern Property boundary with restricted access via Thornydale Road containing a Tucson Water booster station, several one-story utility buildings and various other aboveground storage tanks owned and operated by the City of Tucson.

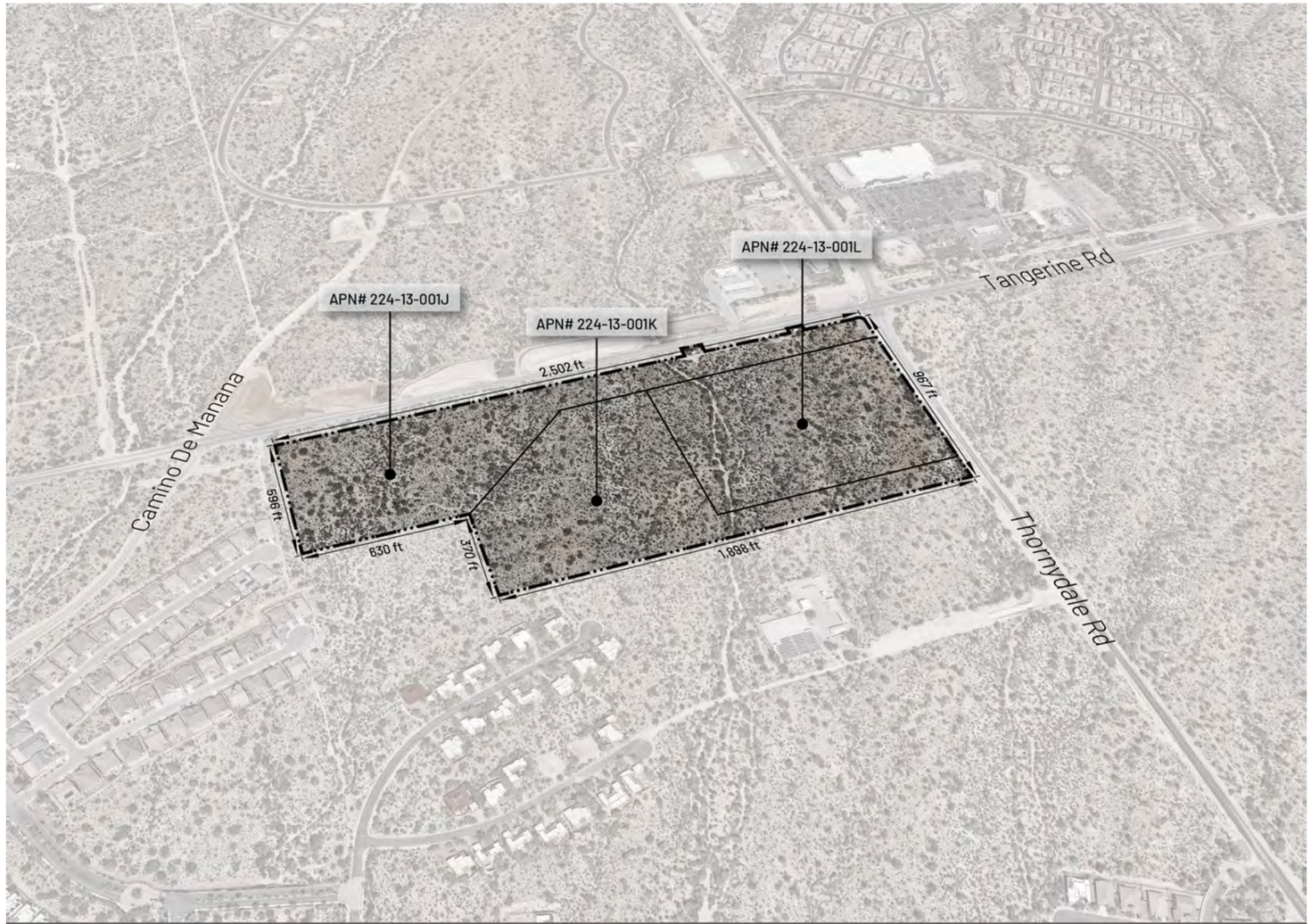


Exhibit II.B.1.b: **PROPERTY DESCRIPTION**

B. Existing Land Uses Cont.

2. Existing Onsite Land Use & Zoning

The Property is currently vacant with no major structures onsite. There are two (2) small buildings located near the north side of the Property with access from Tangerine Road. The first is a telecommunication building owned by AT&T (Mobility Site AZ L00554). The second is a fiber optics building, owner unknown. There are also two (2) cell towers attached to power poles onsite. There is no indication of past grading on any portion of the Property. Aside from several informal trails cutting through the Property and dirt roads along the northern and eastern perimeter of the Property, the Property remains undisturbed. The existing zoning designation on the property is R-144 (Single Family Residential). (*See Exhibit II.B.2: Existing Zoning.*)

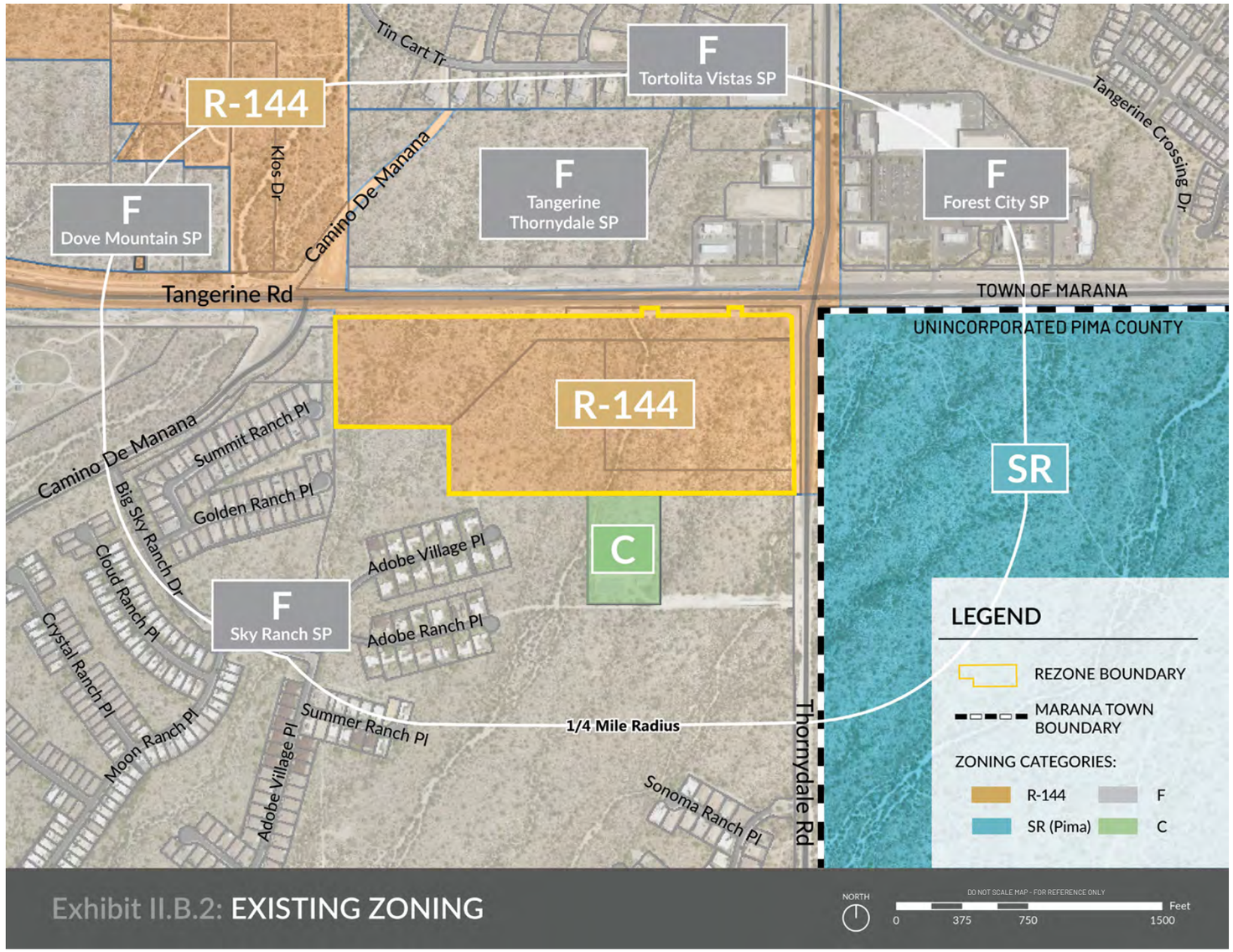


Exhibit II.B.2: EXISTING ZONING

B. Existing Land Uses Cont.

3. Existing Conditions on Properties within a One-Quarter (1/4) Mile Radius

a. Zoning

Zoning designations of surrounding properties as depicted in *Exhibit II.B.2: Existing Zoning* are as follows:

North: Town of Marana F (Specific Plan), *Tangerine and Thornydale SP*, Town of Marana F (Specific Plan), *Tortolita Vistas SP*.

South: Town of Marana C (Large Lot Zone), Town of Marana F (Specific Plan), *Sky Ranch SP*.

Northeast: Town of Marana F (Specific Plan), *Forest City SP.*

East: Unincorporated Pima County SR (Suburban Ranch).

West: Town of Marana F (Specific Plan), *Skyranch SP*, Town of Marana F (Specific Plan), *Dove Mountain*.

B. Existing Land Uses Cont.

3. Existing Conditions on Properties within a One-Quarter (1/4) Mile Radius Cont.

b. General Plan Land Use

The 2020 Town of Marana General Plan, Make Marana, indicates the designated future land use for this Property is Commercial. The surrounding General Plan designations within one-quarter (1/4) mile of the site, as depicted in *Exhibit II.B.3.b: General Plan Designations*, are as follows:

North: Master Planned Area

South: Master Planned Area

East: Low Density Residential

West: Master Planned Area

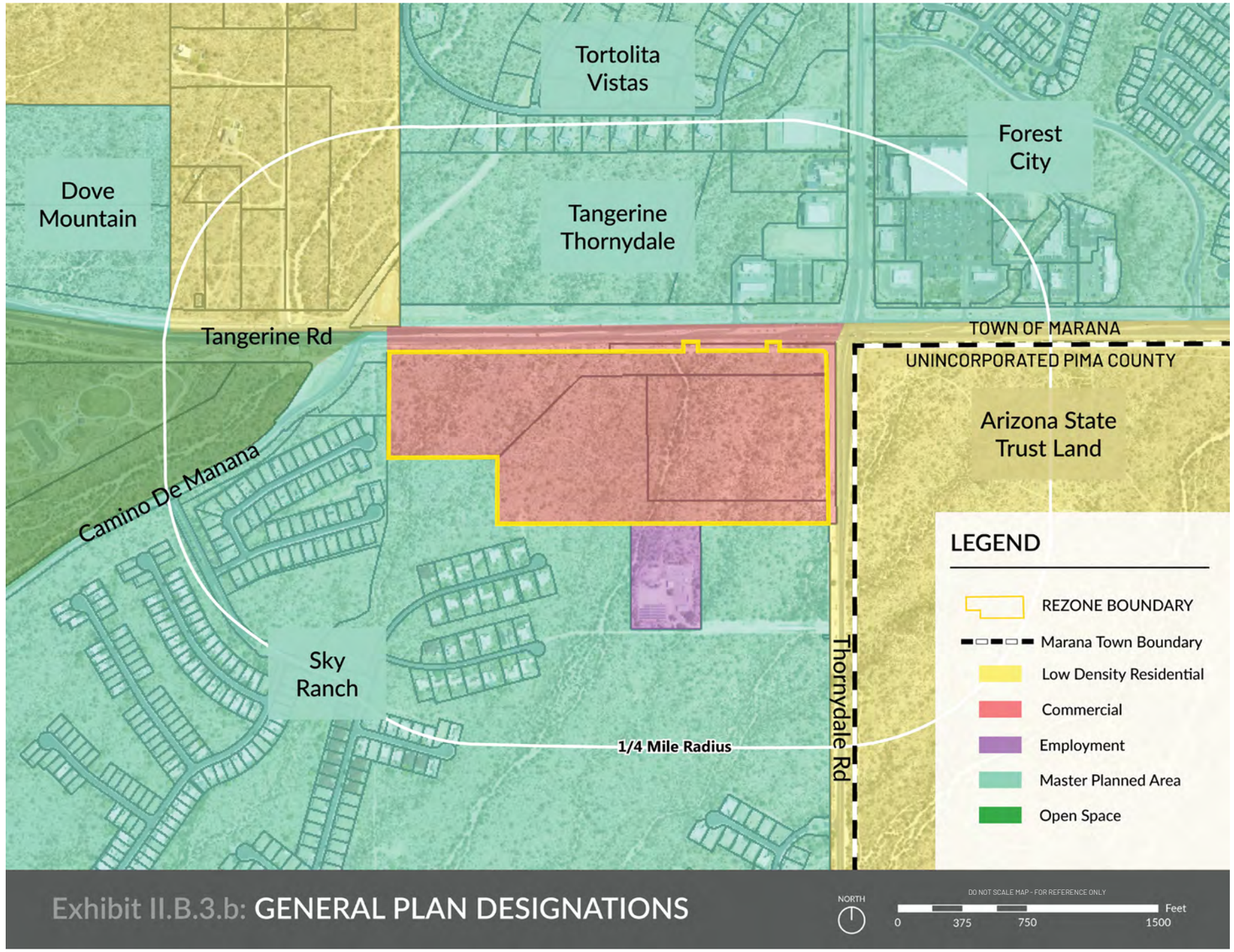


Exhibit II.B.3.b: GENERAL PLAN DESIGNATIONS

B. Existing Land Uses Cont.

3. Existing Conditions on Properties within a One-Quarter (1/4) Mile Radius Cont.

c. Existing Land Use

Land uses on surrounding properties within one-quarter (1/4) mile, as depicted in *Exhibit II.B.3.c: Existing Land Uses*, are as follows:

North: Tangerine Road, single-family residential, Villagio Commercial Center, the Shoppes at Tangerine Crossing Commercial Center.

South: Tucson Water facility and photovoltaic power station, single-family residential, open space.

East: Thornydale Road, vacant Arizona State Trust Land in Unincorporated Pima County.

West: Single-family residential, Tangerine Sky Community Park.



B. Existing Land Uses Cont.

3. Existing Conditions on Properties within a One-Quarter (1/4) Mile Radius Cont.

d. Number of stories of existing structures

The small utility buildings located near the northern portion of the Property are each one (1) story tall. Building heights near the Property are generally one (1) to two (2) stories.

e. Pending and Conditional Rezoning Cases

According to the Town's most recent Current and Proposed Projects map, there are no pending or approved conditional rezonings within one-quarter mile of the Property.

f. Subdivision/Development Plans Approved

According to the Town's most recent subdivisions maps, there are multiple approved subdivisions within one-quarter (1/4) mile of the Property:

Sky Ranch Blocks A-B, (1-365) – *south of Property*
Acres: 434.89
Lot Count: 365
Type: Residential
Record Date: 6/17/2004

Sky Ranch II (1-53) – *south of Property*
Acres: 17.59
Lot Count: 53
Type: Residential
Record Date: 6/21/2012

Tortolita Vistas (1-22, 36-39, 92-150) – *north of Property*
Acres: 167.23
Lot Count: 83
Type: Residential
Record Date: 4/12/2007

Tortolita Vistas (23-25, 40-91, 151-154) – *north of Property*
Acres: 62.16
Lot Count: 69
Type: Residential
Record Date: 6/4/2015

Villagio (1-3) Blocks A & B – *north of Property*
Acres: 12.94
Lot Count: 3
Type: Residential
Record Date: 6/19/2008

Villagio Lot 1 Resubdivision Lots 1 & 4 – *north of Property*
Acres: 4.69
Lot Count: 2
Type: Residential
Record Date: 5/21/2017

Tangerine Crossing (1-347) – *northeast of Property*
Acres: 256.5
Lot Count: 347
Type: Residential
Record Date: 2/16/2006

Tangerine Crossing Commercial Center – *northeast of Property*
Acres: 14.06
Lot Count: 6
Type: Commercial
Record Date: 7/6/2006

Tangerine Crossing Commercial Center II – *northeast of Property*
Acres: 9.61
Lot Count: 6
Type: Commercial
Record Date: 10/26/2014

According to Pima County's most recent development plans map, there is one (1) existing development plan located within one-quarter (1/4) mile of the Property:

Tangerine Crossing Commercial Center
Approved: 11/27/2006

g. Architectural Style of Adjacent Development

The adjacent single-family residential homes in the Sky Ranch Neighborhood have a mix of stucco and brick exteriors in a variety of earth-toned colors complementary to the surrounding desert color palette. The homes have an American southwestern architectural aesthetic and include desert landscaping. The neighborhood contains one and two-story homes with both flat and pitched roof types.

B. Existing Land Uses Cont.

4. Well Sites within 100 Feet of Property

According to the Arizona Department of Water Resources, there are no wells located on the Property or within a 100-foot radius of the Property. One (1) well (#634976), as depicted in *Exhibit II.B.3.c: Existing Land Uses*, is located within a one-quarter (1/4) mile radius northwest of the Property.

C. Topography & Slope

The elevations of the Property range from approximately 2,684 feet near the northeastern corner to approximately 2,646 feet near the southwestern corner nearest W. Summit Ranch Place. Existing topography at 2-foot contour intervals is shown on *Exhibit II.C: Topography & Slope*. All topographic information is from Pima County's Geospatial Data Portal.

1. **Hillside Conservation Areas**

   There are no Hillside Conservation Areas located on or near the Property.

2. **Rock Outcrops**

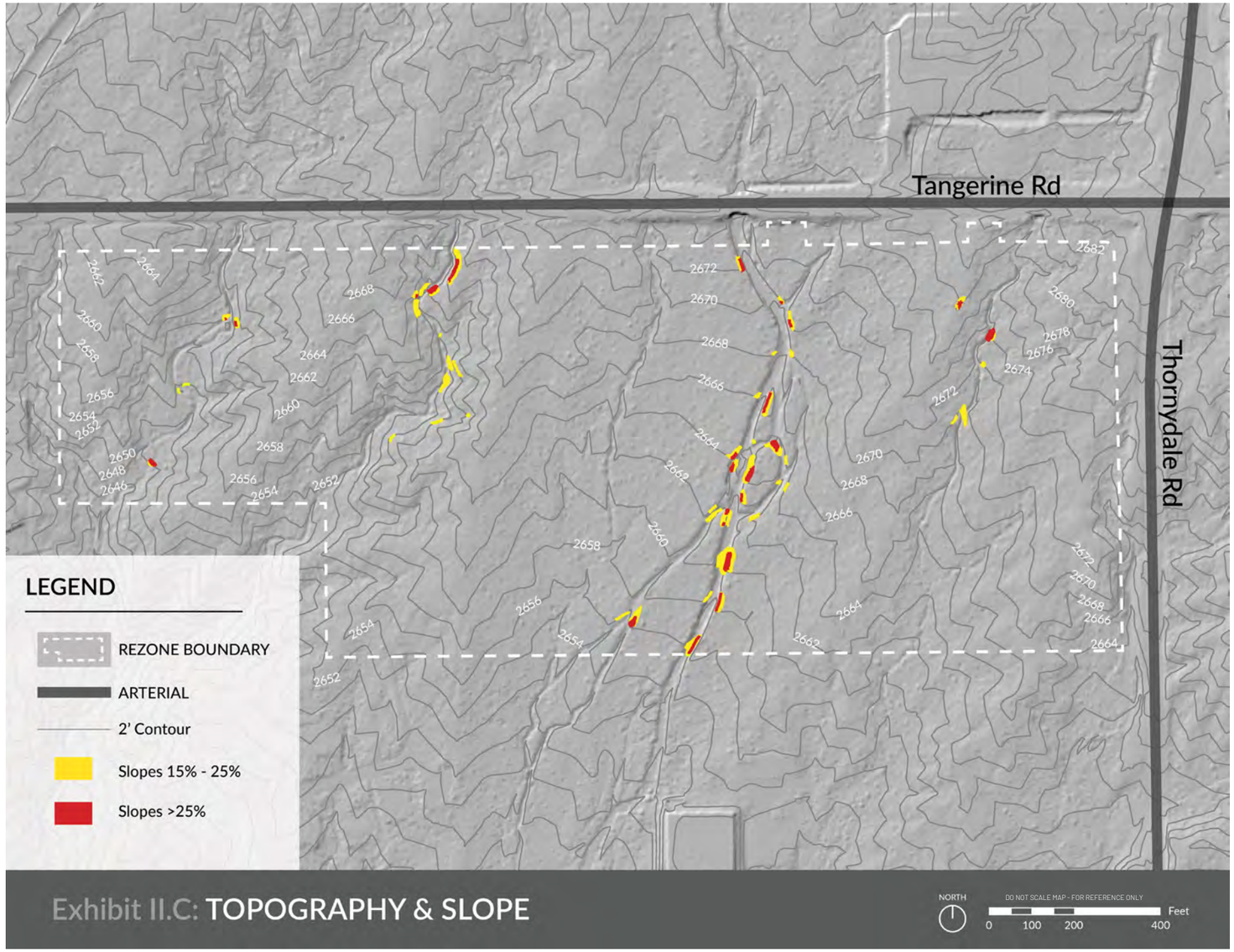
   There are no rock outcrops on the Property.

3. **Slopes of 15% or Greater**

   The Property slopes gradually from the northeast towards the southwest. There are minimal areas where slopes are greater than 15%. These are insignificant and primarily located around wash channels passing through the Property. (*See Exhibit II.C: Topography and Slope*.)

4. **Other Significant Topographic Features**

   There are no other significant topographic features on the Property.



C. Topography & Slope Cont.

5. Statement of Pre-Development Cross-Slope

The average cross-slope ("ACS") of the Property is approximately 2.4%. The pre-development cross slope calculation and values used are as follows:

ACS = (I x L x 0.0023) / A

ACS = (2 x 26,350 x 0.0023) / 50.92

Where:

I = contour interval (2')

L = total length of contours (26,350')

0.0023 = conversion of square feet into "acres x 100"

A = Project site or parcel area in acres (50.92 acres)

ACS = 2.4 %

D. Hydrology, Water Resources & Drainage

The Property is approximately 50.92 acres and is currently undeveloped with two small utility structures and no paved areas. The Property slopes gently from the northeast towards the southwest and contains several areas of slopes greater than 15% located around washes passing through the Property. The ACS of the Property is approximately 2.4%.

1. Offsite Watersheds & Features

Exhibit II.D.1: Pre-Development Hydrology shows the perimeter of all offsite watersheds that affect or are affected by the Property both upstream and downstream. The Property falls within the Canada Agua West Wash Watershed. All washes crossing the Property originate from the Tortolita Mountain Foothills and convey in a southwesterly direction.

The most significant offsite features affecting the hydrology of the Property are the box culverts under Tangerine Road and Thornydale Road to the north and east, respectively. These structures allow stormwater runoff from neighboring areas to flow under these roadways and through the Property. There are four (4) culverts located under Tangerine Road just north of the Property within the watersheds affecting the Property. There is also one (1) culvert under Thornydale Road near the southeast corner of the Property. All the washes crossing the Property exist in a natural condition. The channels are generally shallow having depths ranging from one (1) to two (2) feet. The channel bottoms are comprised of loose, sandy soils and moderate to dense desert vegetation. Runoff is contained within the low-flow channel systems during the more periodic low-intensity rainfall events. Large flood flows overtop the banks and spread across broad areas as sheet flow.

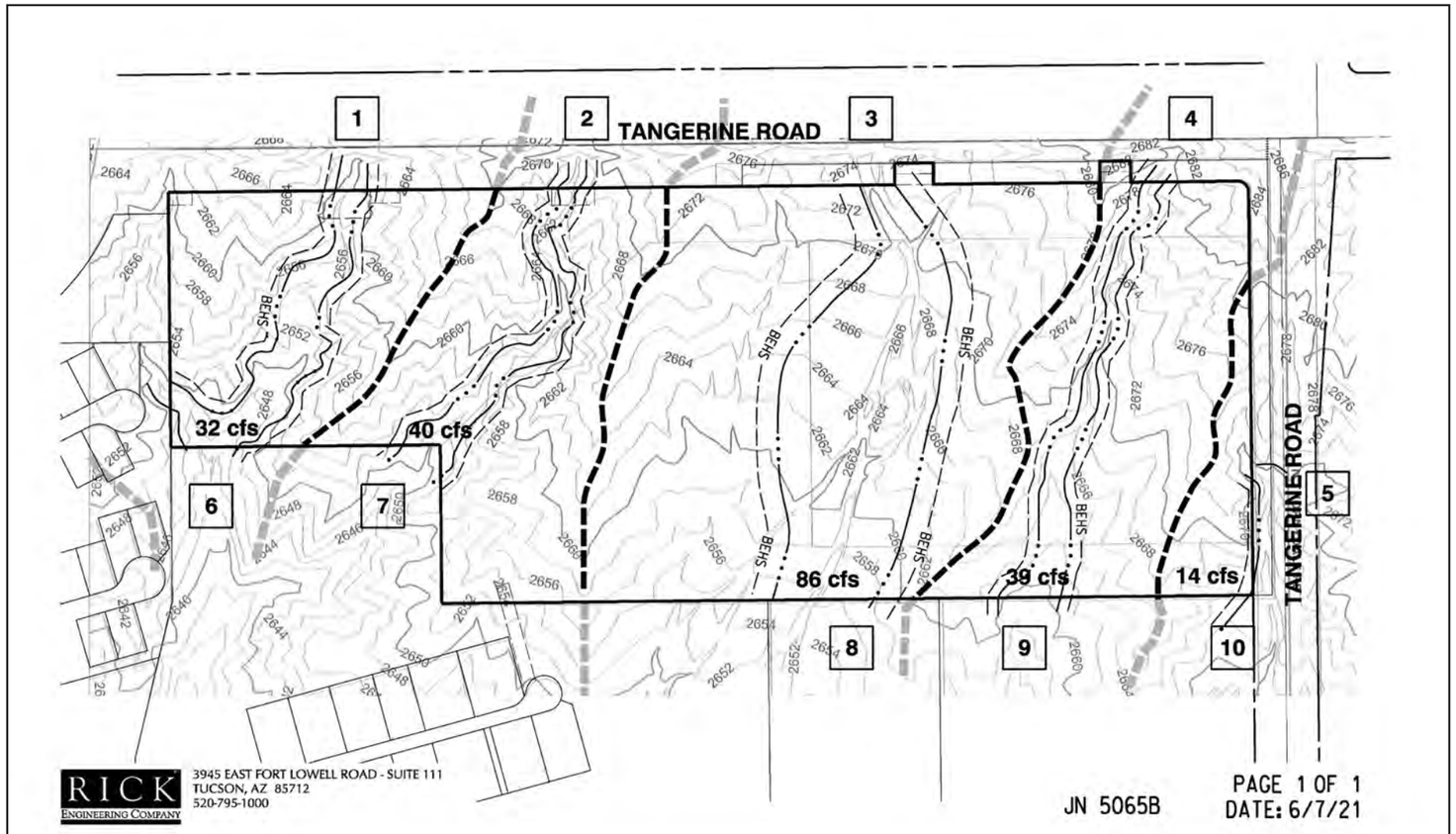


Exhibit II.D: **Pre-Development Hydrology**

D. Hydrology, Water Resources & Drainage Cont.

1. Offsite Watersheds and Features Cont.

There are no floodplains onsite nor any located on adjacent properties. The nearest floodplain is located approximately 500 feet from the northwest corner of the Property (Canada Agua 2 Wash). The area of the upstream offsite watersheds with a 100-year peak discharge rate of 50 cfs or more is given in *Table II.D.1: Offsite Watersheds*. The concentration point locations for these watersheds are shown in *Exhibit II.D: Pre-Development Hydrology.*

Table II.D.1: Offsite Watersheds

Summary of 100 yr. Q's		
Concentration Point	Q100 (CFS)	Drainage Area (Acres)
1	140	28
2	127	128
3	810	321
4	63	9
5	312	83

Data Source: Stage V Cross Drainage Report for Tangerine Road

D. Hydrology, Water Resources & Drainage Cont.

2. Characteristics of Onsite Hydrology

a. On-Site Drainage Flow Conditions
Onsite drainage flow conditions are characterized by offsite watersheds with a 100-year peak discharge rate of 50 cfs or more, as listed in Table II.D.2. The concentration point locations of these watersheds are shown in *Exhibit II.D: Pre-Development Hydrology.*

b. Federally Mapped Floodways and Floodplains
There are no 100-year floodplains or floodways located on the Property. According to the FEMA FIRM MAP 04019C1070L, revised June 16, 2011, the Property is located within Zone X. FEMA defines this zone as an area determined to be outside the 0.2% annual chance floodplain.

c. 100-year Peak Discharges Exceeding 50 cfs
The peak discharge rates for all washes having a 100-year event flow of more than 50 cfs are listed in *Table II.D.2: Onsite & Cumulative Hydrology.*

d. Existing Drainage Conditions along Downstream Property Boundary

The areas of the downstream watersheds and their 100-year peak discharges are provided in *Table II.D.2*. Runoff along the downstream Property boundary is similar to the flow conditions throughout the Property. All-natural watercourses leave the Property and pass through Sky Ranch along the south and west boundaries of the Property. The washes along the downstream boundary exist in their natural condition.

Table II.D.2: Onsite & Cumulative Hydrology

Summary of 100 yr. Q's				
Concentration Point	Drainage Area (Acres)	Q100 (CFS)	Cumulative Drainage Area (Acres)	Cumulative Q100 (CFS)
6	8	32	36	172
7	10	40	38	167
8	21	86	342	896
9	10	39	19	102
10	1.5	14	85	326

E. Vegetation

1. Vegetative Communities & Associations

The Property is located along the Tortolita Alluvial Fan that extends southward from the Tortolita Mountains approximately 4 miles to the north. The Pima County Sonoran Desert Conservation Plan (SDCP) Marana GIS vegetation layer categorizes vegetation on the Property as Paloverde – Mixed Cactus in the uplands and Shrub – Scrub Disclimax along the washes. *Table II.E: Plant Species Commonly Observed Onsite* includes a list of species commonly observed on the Property during a site visit in February 2021. Sonoran Desertscrub of the Arizona Upland Subdivision, as depicted in *Exhibit II.E.1: Vegetative Communities and Associations*, is the only vegetative community located on the Property.

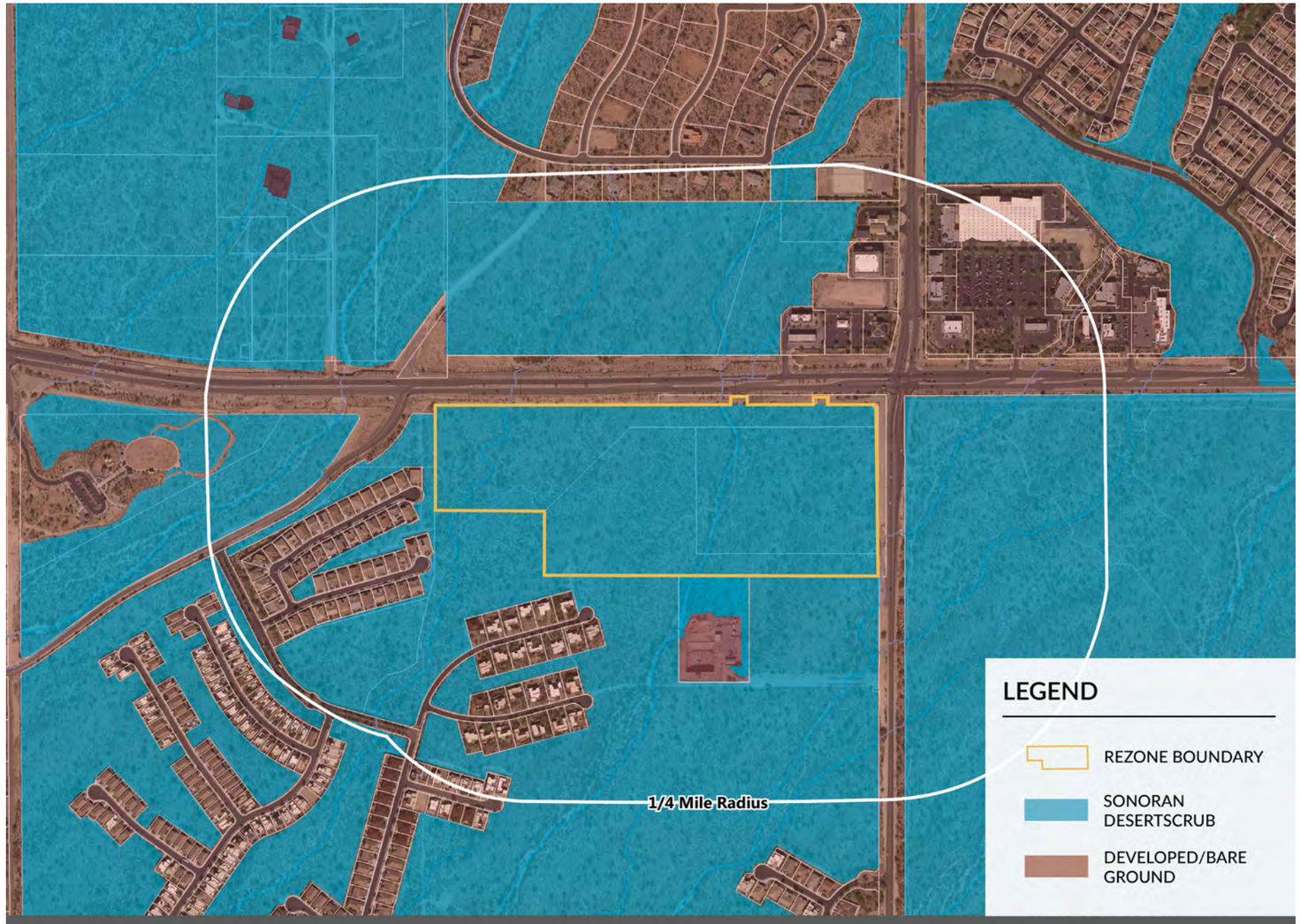


Exhibit II.E.1: VEGETATIVE COMMUNITIES AND ASSOCIATIONS

E. Vegetation Cont.

1. Vegetative Communities & Associations Cont.

Upland vegetation across the Property is uniform. Several braided wash channels of varying sizes pass through the Property with flows running north to south. These washes have culverts under Tangerine Road and traverse the Property. The vegetation community along these washes is similar to the upland portions but in different proportions with more robust individuals at higher densities. The largest of the washes is the second wash from the east and supports the most robust individual plants in a nearly continuous, typically single-plant deep, line along the banks. The other three washes display varying degrees of xeroriparian development, from the eastern wash where little difference from the surrounding upland vegetation is distinguishable on aerial photography, to the western wash where the associated band of vegetation is more visible. A Site Resources Inventory ("SRI") was performed by Westland Resources, Inc. (included as *Appendix A*).

Table II.E: Plant Species Commonly Observed Onsite

Scientific Name	Common Name		Scientific Name	Common Name
Ambrosia deltoidea	Triangle-leaf bursage		*Ferocactus wislizeni*	Barrel cactus
Carnegiea gigantea	Saguaro		*Larrea tridentata*	Creosotebush
Celtis spinosa	Desert hackberry		*Lycium* sp.	Wolfberry
Baccharis sarothroides	Desert broom		*Mammillaria grahamii*	Pincushion cactus
Cylindropuntia acanthocarpa	Buckhorn cholla		*Olneya tesota*	Desert ironwood
Cylindropuntia fulgida	Chainfruit cholla		*Opuntia engelmannii*	Prickly pear cactus
Cylindropuntia leptocaulis	Christmas cholla		*Parkinsonia florida*	Blue paloverde
Cylindropuntia spinosior	Cane cholla		*Parkinsonia microphylla*	Foothills paloverde
Cylindropuntia versicolor	Staghorn cholla		*Prosopis velutina*	Velvet mesquite
Echinocereus sp.	Hedgehog cactus		*Vachellia constricta*	Whitethorn acacia
Ephedra sp.	Jointfir		*Ziziphus obtusifolia*	Graythorn

E. Vegetation Cont.

2. Significant Cacti & Groups of Trees

No unusual groupings of native cacti or trees or other native vegetation were observed on the Property, as indicated in *Exhibit II.E.2: Site Resource Inventory.* (See also *Appendix A*.)

3. Special-Status Plant Species

No special-status plant species were observed on the Property. Special-status species include those protected by the Endangered Species Act or identified as Special Status Species in the Arizona Game and Fish Department ("AZGFD") Heritage Data Management System ("HDMS") Arizona Environmental Online Review Tool ("OLERT") report obtained online for this project. (See *Appendix B*.)

No special-status plant species were identified on the Property or in its immediate vicinity in a query of the U.S. Fish and Wildlife Service ("USFWS") Information, Planning, and Consultation System ("IPaC") database (see *Appendix C*). The IPaC query provides a list of species with Endangered Species Act ("ESA") classification possibly occurring within one or more United State Geological Survey 7.5-minute quadrangles intersecting the Property.

The OLERT identifies one plant species without federal protection within 3 miles of the Property. The Tumamoc globeberry (*Tumamoca macdougalii*) was delisted in 1993 (AZGFD 2004, USFWS 1993) and is considered vulnerable (S3) in Arizona (AZGFD 2004). The globeberry was not observed during a field investigation of the Property, although a full survey of the Property was not conducted for any specific species.

The Town's draft Habitat Conservation Plan ("HCP") does not include any plant species.

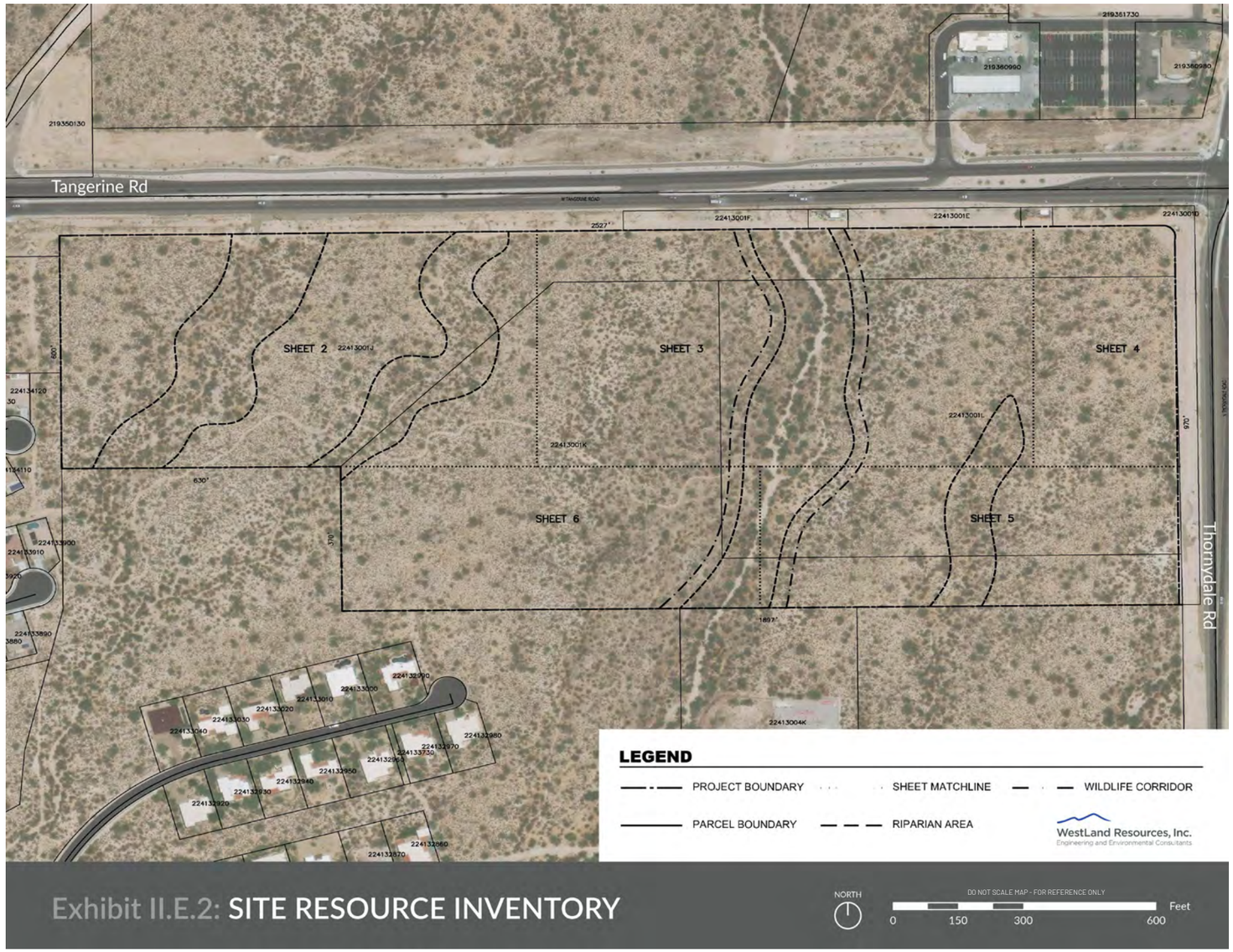


Exhibit II.E.2: SITE RESOURCE INVENTORY

E. Vegetation Cont.

4. Vegetative Densities

Based on qualitative assessment, vegetative densities on the Property are similar to other undeveloped lands in the vicinity, as depicted in *Exhibit II.E.2: Site Resource Inventory*. Upland vegetation density is moderate and vegetation density lining washes is high, especially in a narrow band along the largest wash. There is a total of 50.92 acres of Arizona Upland subdivision of Sonoran Desertscrub on the Property, as depicted in *Exhibit II.E.1: Vegetative Communities & Associations.*

F. Wildlife

In support of this analysis, a query of AZGFD HDMS occurrence records via OLERT was performed to obtain records of special-status species within 3 miles of the Property (see *Appendix B*.) As shown in *Table II.F*, occurrence records for five special-status species of wildlife were found within 3 miles of the Property. Only one species with ESA classification, the Sonoran desert tortoise (*Gopherus morafkai*), a Candidate species with no ESA protections, was reported within 3 miles in the HDMS query. One bird species with Migratory Bird Treaty Act protections, the cactus ferruginous pygmy-owl (*Glaucidium brasilianum cactorum*), was included on the OLERT list. The other three species have various state rankings (SRank) by AZGFD regarding vulnerability.

Table II.F: Wildlife with AZGFD HMDS Occurrence Records within 3 Miles

Scientific Name	Common Name	USFWS Status	State SRank
Glaucidium brasilianum cactorum	Cactus ferruginous pygmy-owl	Species of Concern	S1S2
Gopherus morafkai	Sonoran desert tortoise	Candidate	S4
Heloderma suspectum	Gila monster	--	S4
Leptonycteris yerbabuenae	Lesser long-nosed bat	Species of Concern	S2S3
Lithobates yavapaiensis	Lowland leopard frog	Species of Concern	S3

F. Wildlife Cont.

1. Letter from Habitat Specialist

a. Presence of any State-Listed Threatened or Endangered Species

The AZGFD state-listed special status species documented within three (3) miles of the project vicinity are:

- Sonoran Desert Tortoise
- Cactus Ferruginous Pygmy-owl
- Gila Monster
- Lesser Long-nosed Bat
- Lowland Leopard Frog
- Tumamoc Globeberry

The Sonoran Desert Tortoise (*Gopherus morafkai*) is a Candidate for ESA protections and AZGFD has occurrence records within 3 miles of the Property. Sonoran Desert Tortoises are most closely associated with rocky slopes, bajadas and exposed caliche along washes. They are commonly known to occur on and around the Tortolita Mountain slopes, approximately 1.5 miles to the north, thus this species has some potential to be found on the Property. Due to the lack of nearby boulder habitat and lack of exposed caliche, it is unlikely any individuals would be more than transients traveling through the Property during their prime period of activity, generally from the first summer rains through the middle of October. Tangerine Road may present a significant barrier to accessing the Property, although they may venture through the culverts under Tangerine Road.

No potential tortoise burrows or signs of activity were observed during the field investigation, although survey for the species was not conducted.

The Gila monster, with no ESA classification, also has occurrence records within 3 miles of the Property. The Gila monster occupies much of the same habitat as the Sonoran desert tortoise and has a similar activity pattern but likely occurring at a lower density. Potential for occurrence of the Gila monster at the site is likely similar to the Sonoran desert tortoise. AZGFD classifies both the Sonoran desert tortoise and Gila monster S4- Apparently Secure (see *Appendix B*).

Of the three remaining species with occurrence records within 3 miles of the Property, the lowland leopard frog has no potential to occur on the property due to a lack of appropriate habitat required by the species, the lesser long-nosed bat has the potential to fly through or forage on the Property and the cactus ferruginous pygmy owl is not likely to occur, as it is believed to be extirpated from the area north and east of Tucson.

High Densities of a Given Species:

AGFD HDMS OLERT report does not include any specific records of high densities of a given species within 3 miles of the site (see *Appendix B*). The property does not possess unique vegetation communities relative to other undeveloped lands in the vicinity, or any physical structures where wildlife could congregate in large numbers, and no evidence was observed during the field investigation.

F. Wildlife Cont.

1. Letter from Habitat Specialist Cont.

b. High Densities of a Given Species

There is no evidence high densities of a given species are located on or around the Property. The AGFD HDMS OLERT report does not include any specific records of high densities of a given species within 3 miles of the Property (see *Appendix B*). The Property does not possess unique vegetative communities relative to other undeveloped lands in the vicinity, nor any physical structures where wildlife could congregate in large numbers. No evidence of unique communities was observed during the field investigation.

c. Aquatic or Riparian Ecosystems

There are no aquatic systems with permanent water sources present on the Property. The National Wetland Inventory ("NWI") designates the large wash on the Property as a seasonally flooded, intermittent riverine system (R4SBC). This NWI designation categorizes the large wash as holding water for brief periods only after local storm events. Pima County categorizes the large wash described by NWI as 500-1000 cubic feet per second ("cfs") with 50-foot setback and the wash mapped by Pima County on the west end of the Property is mapped as less than 500 cfs with a 25-foot setback.
As described in the *Appendix A: Site Resource Inventory*, four wash channels were delineated on the Property and all support xeroriparian vegetation plant species.

Two western xeroriparian riparian wash areas (includes the smaller wash mapped by Pima County and a small unmapped wash to the east) begin Wto develop less than 1,000 feet north of the Property and the easternmost riparian area (not mapped by Pima County) begins to form on the Property. The xeroriparian area along the large wash (mapped by NWI and Pima County) located in the east-central portion provides the only drainage with connectivity extending a significant distance both north and south of the Property.

d. Wildlife Corridors

Tangerine Road and Thornydale Road present hazards to wildlife crossing. Several culverts under Tangerine Road provide potential safe movement of wildlife across the road. The culverts range from approximately 120 to 175 feet long, with the shortest culvert at the large wash. This wash also has a substantially larger culvert, with three boxes and a total width of approximately 32 feet, but only 3 to 4 feet high. An openness ratio (culvert cross-section acre/culvert length) of at least 0.75 and height of 6 feet or more is recommended to accommodate large mammals, so this culvert is not ideal for large mammal passage but may be suitable for medium and small wildlife, such as javelina. The other three culverts are approximately 1/3 of the size of the large culvert and are longer, so are proportionally less suitable for wildlife passage. The large wash is also the only wash of the four extending a significant distance both downstream and upstream.

Additionally, cleared vegetation lateral to the roadway could present a deterrent to wildlife movement through the right-of-way. The large wash traversing the Property will remain naturally vegetated through the entirety of the Property to facilitate potential wildlife movement through the Property to surrounding areas.

The Property is approximately 1.5 miles east of the "Tucson Mountains Ridge to Santa Cruz River/Tortolita Fan missing linkage" connecting the Tucson Mountains with Saguaro National Park (west) to the Tortolita Mountains. It is within the broad Saguaro – Tortolita Wildlife Linkage.

G. Soils & Geology

1. Soils

The Property is situated in an area filled with eolian and alluvial deposits. Significant deposits of sands and silts are present around the Property's drainage channels. Surveyors probed deposits in the survey area by inserting a pin flag into the soil and measuring the depth reached by the pin flag. An average of 20–30 cm of deposition was found to be present.

2. Geology

The geology of the Property consists of quaternary surficial deposits, undivided, consisting of unconsolidated to very consolidated eolian and alluvial deposits. This includes coarse, poorly sorted alluvial fan and terrace deposits on piedmonts along drainages. Sediments found here consist of sand, silt, and clay. Episodes of basin filling and arroyo cutting are normal here, occurring over thousands of years. This landscape can change and has changed over time.

H. Viewsheds

1. Viewsheds Onto and Across the Site

The Property is located at the southwest corner of Tangerine Road and Thornydale Road on vacant land approximately 6 miles east of the Interstate-10 Highway. Several clusters of single-family homes, two (2) commercial shopping centers and vacant land are located near the Property. The Property is located in an urbanized area set aside for future infill development by the Town. Most of the Property is currently undisturbed. Viewsheds onto and across the Property are partially obstructed by dense vegetation. Due to an elevation difference of approximately 36 feet from the Property's highest to its lowest points, viewsheds near the northeastern portion of the Property are slightly less obstructed than those near the southwestern portion of the Property.

The significant views and vistas beyond adjacent properties include the Tortolita Mountains to the north, the Catalina Mountains to the east and the Tucson Mountains to the southwest. Views of these mountain ranges are unobstructed by existing structures, vegetation and topography.

See *Viewsheds Onto and Across Property from Adjacent Areas, Photos 1-12.*

2. Areas of High Visibility from Adjacent Off-Site Uses

Areas of high visibility from adjacent off-site uses are found along the Property's boundaries, particularly along Tangerine Road and Thornydale Road to the north and east, respectively. The Property is visible from these roadways because they are slightly higher than the elevation of the Property itself.

Areas of lower visibility from adjacent off-site uses are found along parts of the Property's other boundaries, particularly along parts of Camino De Manana as well as Summit Ranch Place and Golden Ranch Place to the west, and Adobe Village Place and Adobe Ranch Place to the south in Sky Ranch.

H. Viewsheds Cont.



Looking north across Property from Tucson Water booster station south of southern Property boundary.





Looking west along Property's southern boundary from Thornydale Rd. at SEC of Property.





Looking south along Property's eastern boundary from NEC of Property at SWC of Tangerine and Thornydale.



H. Viewsheds Cont.



Looking southwest across Property from NEC of Property at SWC of Tangerine and Thornydale.





Looking west along Property's northern boundary from NEC of Property at SWC of Tangerine and Thornydale.





Looking southwest across Property from Tangerine Rd.



H. Viewsheds Cont.



Looking southeast across Property from NWC of Property at SEC of Tangerine and Camino De Manana.





Looking east across Property at end of cul-de-sac from Summit Ranch Place.





Looking east across Property at end of cul-de-sac from Golden Ranch Place.



H. Viewsheds Cont.



Looking southwest at NEC of Property from NEC of Tangerine and Thornydale in front of AutoZone parking lot.





Looking south across Property from Circle K driveway along Tangerine Rd.





Looking west across Property from SEC of Tangerine Rd. and Thornydale Rd.



I. Traffic Circulation & Road System

A Traffic Impact Analysis ("TIA") has been completed for this Property by Rick Engineering and is included as *Appendix D* of this Specific Plan. The following is a brief description of the existing roadways within the project area:

1. **Existing and Proposed Off-Site Streets**

   Exhibit II.I.1: Traffic depicts arterial roadways within one mile of the Property. Each of these roadways is described in *Table II.I: Roadway Inventory.*

Table II.I: Roadway Inventory*

	Tangerine Road	Thornydale Road	Camino de Manana	Camino de Oeste		Moore Road
				N. of Tang. Rd	S. of Tang. Rd	
Streets Classification	Arterial	Arterial	Collector	Collector	Local	Arterial
Existing R.O.W. (ft)	Approx. 125-480	Approx. 100-210	Aprox. 60-300	150	80	Approx. 60-150
Confroms to Widths Standards	Yes	Yes	Yes	Yes	Yes	Yes
Ownership	Marana	Marana	Marana	Marana	Marana	Marana
R.O.W. is curved or is straight	Straight	Straight	Curved	Straight	Straight	Straight
Current Number of Lanes	4	2-4	2	2	2	2
Speed Limit (mph)	45	40	35	35	N/A	40
Traffic Volumes: AADT (Count, Year)	14,276 (2021)	N. of Tang. Rd. 5,128 (2020) S. of Tang. Rd. 8,629 (2020)	3,188 (2020)	N/A	211 (2020)	169 (2020)
Surface Conditions	Paved	Paved	Paved	Paved	Unpaved	Paved

*Within 1-Mile Radius of Property

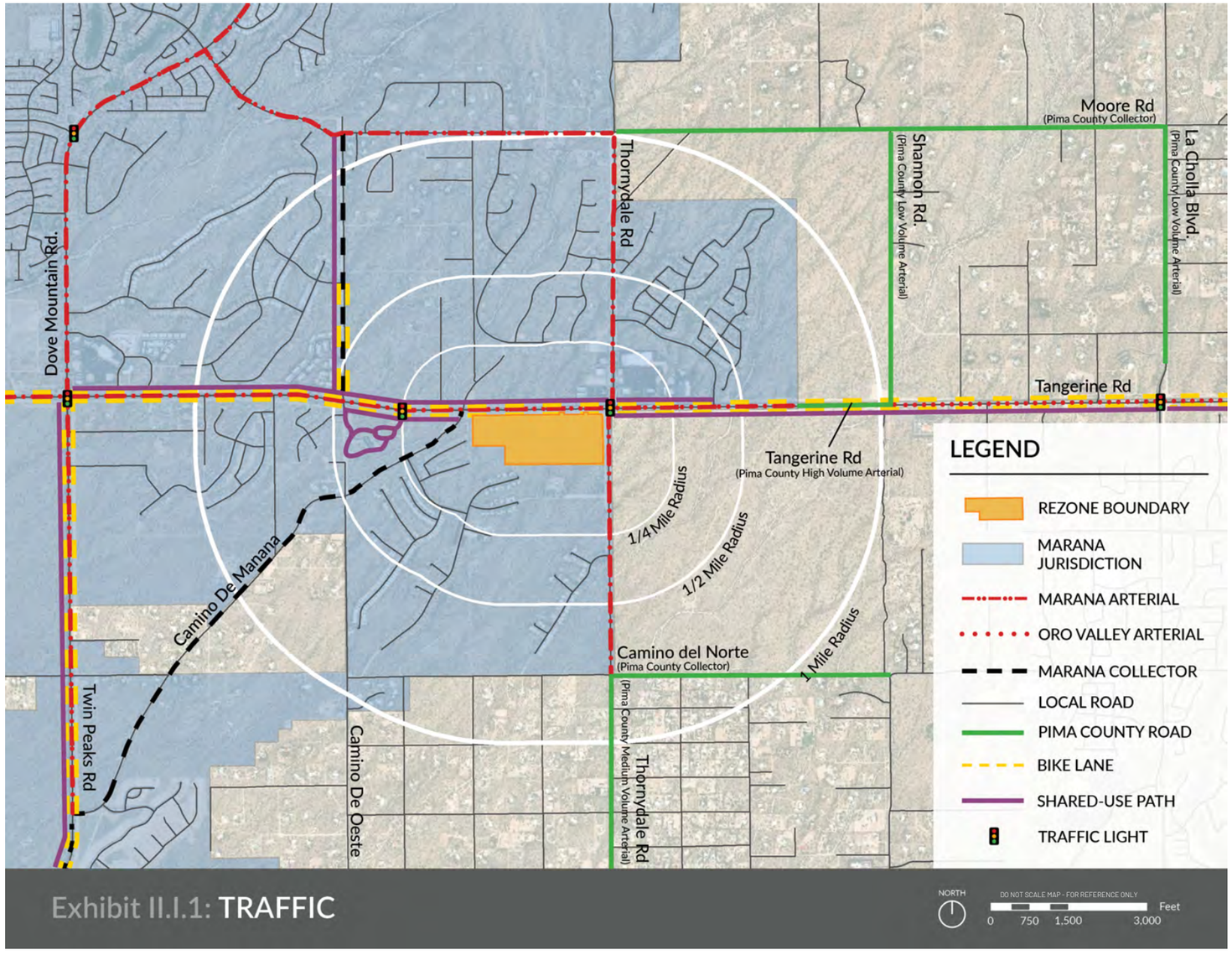


Exhibit II.I.1: TRAFFIC

I. Traffic Circulation & Road System Cont.

2. **Arterial Intersections within One (1) Mile**

Tangerine Road/Camino De Oeste is a paved, signalized intersection with four (4) approaches. The intersection serves mainly single-family homes and the Tangerine Sky Park. Tangerine Road has two (2) lanes of vehicular travel in each direction at this intersection. It contains one (1) left turn lane for each direction of travel with median breaks and one (1) right turn lane for each direction of travel providing access onto Camino De Oeste. There is one (1) continuous, shared-use path directly north of Tangerine Road. The shared-use path directly south of Tangerine Road turns southward and connects to Tangerine Sky Park. There is no shared-use path along the southwest corner of this intersection. Camino De Oeste has one (1) lane of vehicular travel in each direction and provides additional left and right turn lanes onto Tangerine Road at its northbound and southbound approaches. The paved portion of Camino De Oeste north of Tangerine Road terminates at Moore Road. The paved portion of Camino De Oeste south of Tangerine Road intersects with Placita Casa Sevilla and also turns into a driveway near the northbound approach of this intersection, leading directly to the parking lot of Tangerine Sky Park (located near the southeast corner of this intersection). This section of Camino De Oeste does not provide access to the unpaved road southwest of Tangerine Sky Park. The large-lot single family homes southwest of Tangerine Sky Park are accessed from Camino De Manana.

Tangerine Road/Camino De Manana is a paved, unsignalized, skewed intersection with four (4) approaches. Tangerine Road has two (2) lanes of travel in each direction at this intersection and contains a median break with one (1) left turn lane for each direction of travel providing access onto Camino De Manana. Tangerine Road also contains one (1) bike lane on the side of the roadway in each direction of travel. Camino De Manana has one (1) lane of travel in each direction and provides an additional right turn lane onto Tangerine at its northbound approach. The north leg of the intersection is a Town-owned parcel and access is restricted, so the intersection operates like a T-intersection. Vehicles may only turn left or right from this intersection's northbound approach.

Tangerine Road/Thornydale Road is the largest intersection by traffic volume within one (1) mile of the Property. The intersection is a paved and signalized with four (4) approaches. Tangerine Road has two (2) lanes of travel in each direction at this intersection. It contains one (1) left turn lane with median breaks for each direction of travel and one (1) right turn lane for each direction of travel providing access onto Thornydale Road. There is one continuous shared-use path directly north of Tangerine Road. The shared-use path directly south of Tangerine Road terminates at the southeast corner of this intersection. There is no shared-use path directly south of Tangerine on the southwest corner of this intersection.

Thornydale Road has two (2) lanes of travel in each direction at this intersection and provides additional left and right turn lanes onto Tangerine Road at its northbound and southbound approaches. There is a lane-drop on to one (1) lane in each direction on the south leg of southbound travel which may affect access to the Property.

Camino De Manana/Camino De Oeste is a partially unpaved, unsignalized, skewed intersection with four (4) approaches. Camino De Manana has one (1) lane of travel in each direction at this intersection and does not provide additional turn lanes. Camino De Oeste has one (1) lane of travel in each direction and does not provide additional turn lanes. Camino De Oeste is unpaved at this intersection at both its northbound and southbound approaches. Camino De Manana is a paved road. Camino De Oeste remains unpaved southbound until its intersection with Corte Sombra Del Tecolote, at which point it becomes paved.

Thornydale Road/Moore Road is a paved, unsignalized intersection with four (4) approaches and a four (4)-way stop. Thornydale has one (1) lane of travel in each direction at this intersection and does not provide additional turn lanes. Moore Road also has one (1) lane of travel in each direction and does not provide additional turn lanes. This intersection is approximately one (1) mile from the Property and will have little to no direct impact on the Property.

I. Traffic Circulation & Road System Cont.

3. Existing Bicycle and Pedestrian Ways

As depicted in *Exhibit II.I.3: Bicycle, Pedestrian, School and Park Connections,* bicycle routes exist along Tangerine Road north of the Property. The Tangerine Road Shared-Use Paths (a series of paved, east-west multi-modal path systems accommodating bicycles and pedestrians) are located directly north and south of Tangerine Road running parallel with the roadway. The bicycle routes along Tangerine Road are separate from the shared-use paths running parallel with Tangerine Road. The shared-use paths have two-way travel on each side of Tangerine Road for a total of four (4) lanes. There is no shared-use path located directly north of the Property. The shared-use path along the south side of Tangerine Road currently terminates at the southwest corner of its intersection with Camino De Manana and at the southeast corner of its intersection with Thornydale Road.

There are two existing curb cuts adjacent to the Property designed to connect to a future shared-use path. These curb cuts are located at the southeast corner of Tangerine Road and Camino De Manana and the southwest corner of Tangerine Road and Thornydale Road. There are no existing pedestrian sidewalks adjacent to the Property.

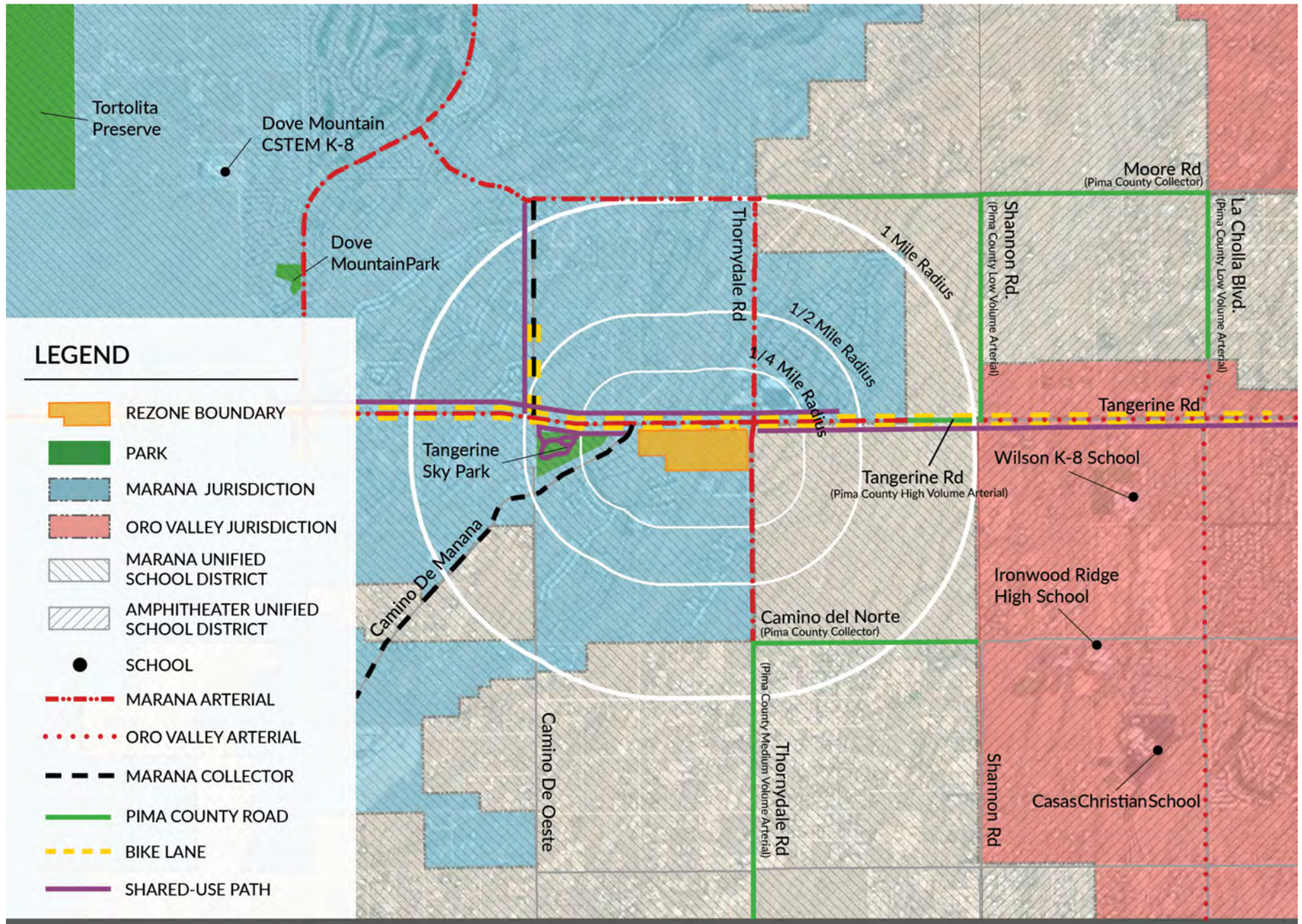


Exhibit II.I.3: BICYCLE, PEDESTRIAN, SCHOOL AND PARK CONNECTIONS

J. Recreation & Trails

As shown in *Exhibit II.J: Trails, Parks and Recreation*, the Tangerine Sky Community Park is located within one mile of the Property, approximately 0.25 miles west of the Property.

Tangerine Sky Park amenities include:

- 3 Ramadas with Grills
- Open Space Grass Area
- 2 Dog Parks
- 1 Basketball Court
- 2 Playground Areas
- Restrooms
- Multi-Use Walking Paths
- Access to Tangerine Road Shared-Use Path

There are paved and unpaved nature trails located within the Tangerine Sky Community Park approximately 0.25 miles from the Property.

The Property is located near a paved shared-use path that runs along the north side of Tangerine Road from Dove Mountain Boulevard to Tangerine Crossing Drive and crosses to the south side of Tangerine Road from Thornydale Road to La Cañada Boulevard.

No other parks, trails or recreation facilities are located within one (1) mile of the Property.

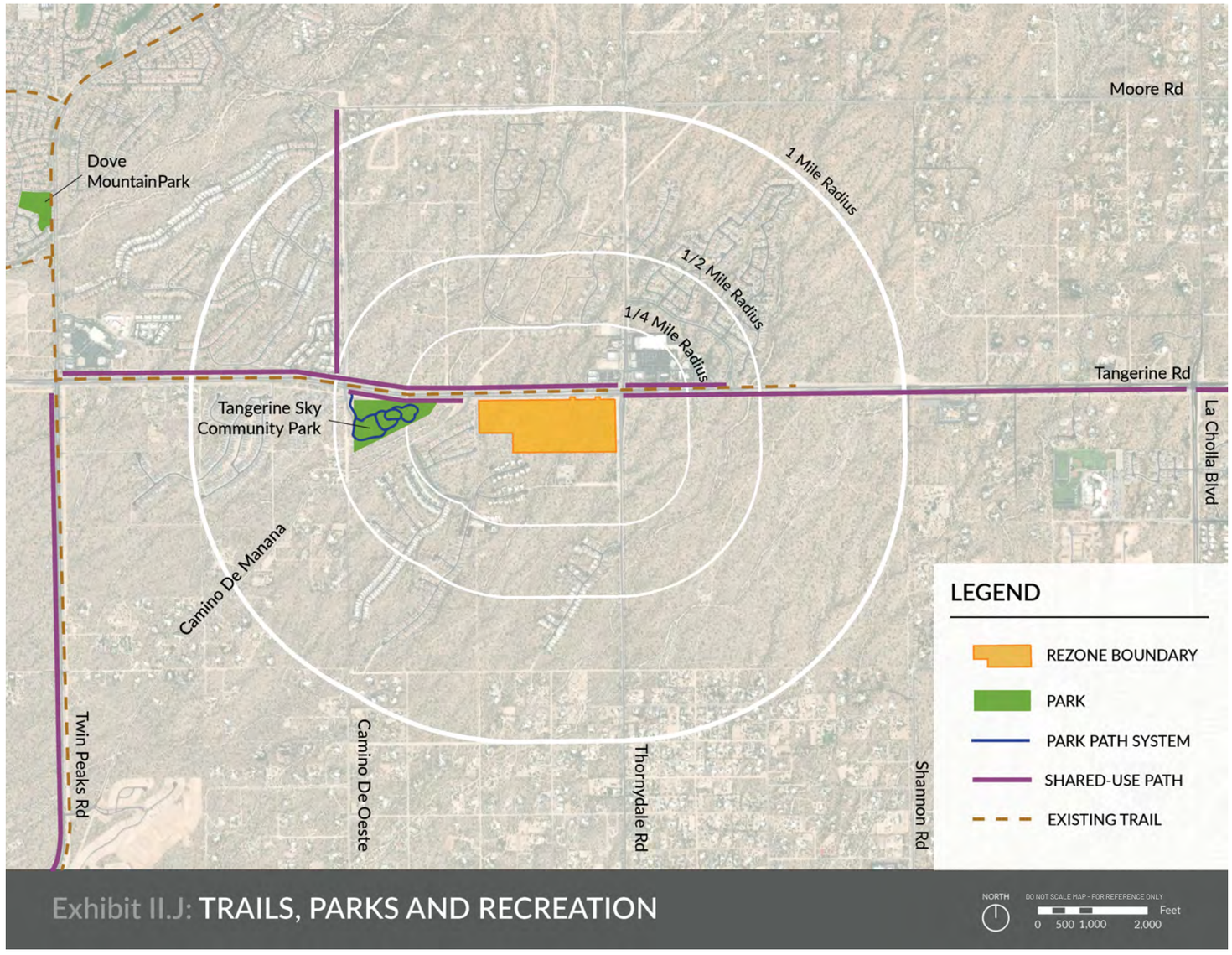


Exhibit II.J: **TRAILS, PARKS AND RECREATION**

K. Cultural, Archaeological & Historic Resources

A Cultural Resources Inventory ("CRI") was performed by WestLand Resources, Inc. to identify potential environmental, historic or cultural impacts on the Property.

There is a possibility for buried deposits. The survey area is located within an alluvial fan, and probing found an average of 20-30 cm of deposition in the area. This is enough for some deposits to be buried. Thus, it is possible buried cultural deposits such as Formative period deposits and Archaic sites are present on the Property. T

The CRI identified two prehistoric cultural remains (an artifact scatter and one projectile point) on the Property. No historic artifacts or features were identified. No National Register of Historic Places-eligible sites were identified.

WestLand Resources, Inc. concluded that no historic properties will be adversely impacted by the Project. No further archaeological work is recommended.

L. Existing Infrastructure & Public Facilities

1. Public Utilities

a. Sewer

The Property is tributary to the Tres Rios Water Reclamation Facility via the Canada del Oro Interceptor. Per correspondence with Pima County Regional Wastewater Reclamation Department ("PCRWRD"), capacity is currently available for the western portion of the Property from the public sewer G-2003-057, downstream from manhole 3712-38 from the Sky Ranch subdivision to the south. Capacity is currently available for the eastern portion of the Property from the public sewer G-2004-171, downstream from manhole 3471-07 adjacent to the west side of Thornydale Road. A sewer service agreement will be needed prior to development of the Property. (See *Exhibit II.L.1.a.1: PCRWRD Capacity Response Letter.*)

Exhibit II.L.1.a.2: Existing Sewer Facilities identifies existing sewer facilities near the Property

b. Water

Tucson Water will provide water service to the Property. Arizona Department of Water Resources ("ADWR") has designated Tucson Water as having an assured water supply. A water service agreement is required to establish service to the Property. (See *Exhibit II.L.1.b.1: Tucson Water Availability Letter*.) The Property also has a total of three (3) City of Tucson water meters.

Exhibit II.L.1.b.2: Existing Water Facilities identifies existing water facilities near the Property

c. Traffic

Fiber optic cables owned and maintained by the Town and used for traffic signal connectivity are located near the northern portion of the Property.

d. Fire Service

Northwest Fire District will serve the Property. The closest fire station is Station 339 located at 12095 N. Thornydale Road, approximately one-quarter (1/4) mile north of the Property.

2. Private Utilities

a. Electricity

The Property falls within the District 1 service area of Trico Electric Cooperative, which will provide electric service to the Property. (See *Exhibit II.L.2.a: Trico Electric Cooperative Service Letter*.) There are transmission lines and overhead power lines located along the Property's northern and eastern boundaries, respectively.

b. Gas

Southwest Gas Corporation has existing facilities in the area and will provide natural gas service to the Property.

c. Communications

It is anticipated CenturyLink will extend phone service to the Property. Alternatively, wireless communications may be used which can be provided by any number of service providers. AT&T currently operates at least one cell tower and owns one small, gated utility building (AT&T Mobility Site AZ L00554) on the north side of the Property. There is a second small, gated utility building on the north side of the Property.

L. Existing Infrastructure & Public Facilities Cont.

Exhibit II.L.1.a: PCRWRD Capacity Response Letter (1)

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

JACKSON JENKINS
DIRECTOR

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

June 17, 2021

Steven Vasquez
Rick Engineering Company, Inc
3945 E Fort Lowell Road, Suite 111
Tucson, AZ 85712

Sewerage Capacity Investigation No. P21WC00179 Type I

RE: **SWC Thornydale & Tangerine Roads - West, Parcels 22413001J, 22413001K**
Estimated Flow 21,600 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-2003-057, downstream from manhole 3712-38.

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.

Exhibit II.L.1.a: PCRWRD Capacity Response Letter (2)

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

JACKSON JENKINS
DIRECTOR

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

June 17, 2021

Steven Vasquez
Rick Engineering Company, Inc
3945 E Fort Lowell Road, Suite 111
Tucson, AZ 85712

Sewerage Capacity Investigation No. P21WC00180 Type I

RE: **SWC Thornydale & Tangerine Roads - East, Parcels 22413001J, 22413001K, 22413001L**
Estimated Flow 69,120 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-2004-171, downstream from manhole 3471-07.

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.

L. Existing Infrastructure & Public Facilities Cont.

Exhibit II.L.1.a.2: Existing Sewer Facilities



L. Existing Infrastructure & Public Facilities Cont.

Exhibit II.L.1.b.1: Tucson Water Availability Letter

TUCSON WATER
A proud part of the City of Tucson

June 8, 2021

Rick Engineering Company
3945 E. Fort Lowell Rd., Suite 111
Tucson, AZ 85712
Attn: Steven Vasquez

SUBJECT: Water Availability for Project: SWC of Tangerine & Thornydale Rd., APN: 22413001J,K,L (3) parcels, Case#: WA3590, T-12 R-13 S-06, Lots: 9999, Location Code: MAR: Total Area: 51.13ac, Zoning: R-144.

WATER SUPPLY

Tucson Water will provide water service to this project based on the subject zoning of the above parcels. Tucson Water has an assured water supply (AWS) designated from the State of Arizona Department of Water Resources (ADWR). An AWS designation means Tucson Water has met the criteria established by ADWR for demonstration of a 100-year water supply - it does not mean that water service is currently available to the subject project.

WATER SERVICE

The approval of water meter applications is subject to the current availability of water service at the time an application is received. The developer shall be required to submit a water master plan identifying, but not limited to 1) Water Use; 2) Fire Flow Requirements; 3) Offsite/Onsite Water Facilities; 4) Loops and Proposed Connection Points to Existing Water System; and 5) Easements/Common Areas.

Any specific area plan fees, protected main/facility fees and/or other needed facilities' cost, are to be paid by the developer. *If the existing water system is not capable of meeting the requirements of the proposed development, the developer shall be financially responsible for modifying or enhancing the existing water system to meet those needs.* ***This letter shall be null and void two years from the date of issuance.***

Issuance of this letter is not to be construed as agency approval of a water plan or as containing construction review comments relative to conflicts with existing water lines and the proposed development.

If you have any questions, please call New Development at 791-4718.

Sincerely,

Michael Mourreale

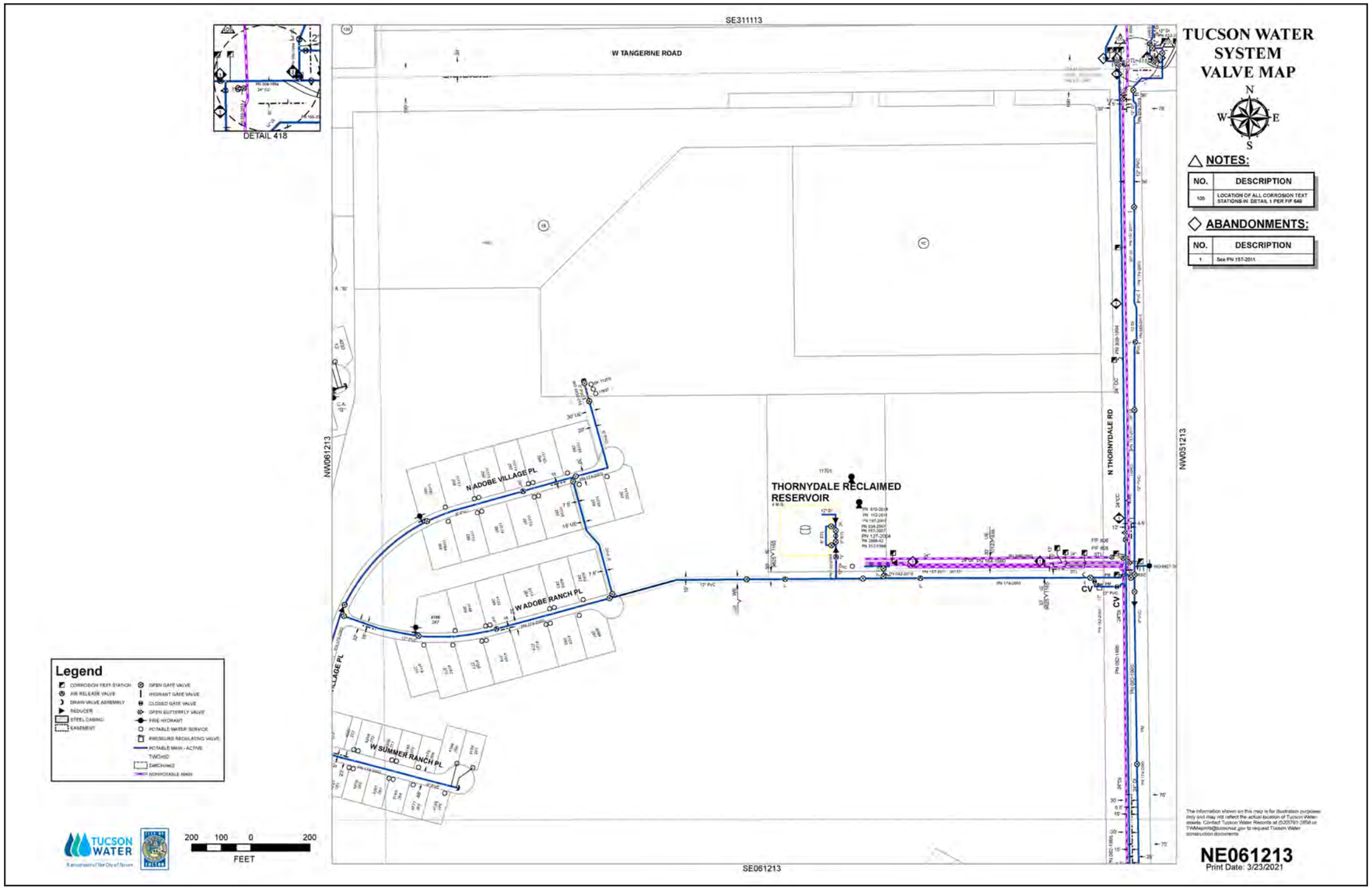
Michael Mourreale
Engineering Manager
Tucson Water New Development

MM:km
cc: WA3590 22413001J,K,L (3) parcels.docx/New Area/Committed Demand/WAL parcels

P.O. Box 27210 • Tucson, AZ 85726-7210
520.791.4718 • tucsonaz.gov/water

L. Existing Infrastructure & Public Facilities Cont.

Exhibit II.L.1.b.2: Existing Water Facilities



L. Existing Infrastructure & Public Facilities Cont.

Exhibit II.L.2.a: Trico Electric Cooperative Service Letter

TRICO
AN ENERGY COOPERATIVE

SENT VIA EMAIL

June 8, 2021

Steven Vasquez
C/O Rick Engineering
svasquez@rickengineering.com

Re: Parcels 22413001J, 22413001K, and 22413001L - T.12S R.13E S.06

To Whom It May Concern:

The above referenced location is contained within the service area of Trico Electric Cooperative, Inc. (Trico). This letter affirms that Trico is willing and able to serve this project according to the Rules, Regulations and Line Extension Policies of Trico. Any relocation of facilities shall be at no expense to Trico.

Please contact our Design Department if you need more information or if you have any questions regarding this letter.

Sincerely,

David Worrell

David Worrell
New Service Technician

POWERED WITH PURPOSE.
P.O. Box 930 • Marana, AZ 85653-0930 • 520.744.2944 • (toll free) 866.337.2052 • WWW.TRICO.COOP • A Touchstone Energy® Cooperative
Trico is an equal opportunity provider and employer

M. McHarg Composite Map

Information about the Property's topography, hydrology, vegetation, wildlife and viewsheds has been combined to form the McHarg Composite Map. The map highlights areas most compatible with development. With no wildlife movement corridors or significant vegetation present onsite, relevant constraints are limited to the Property's topography, hydrology and viewsheds, as demonstrated in *Exhibit II.M: McHarg Composite Map*. See Section III (Proposed Land Use Plan) for more information about how the site plan will respond to these constraints.

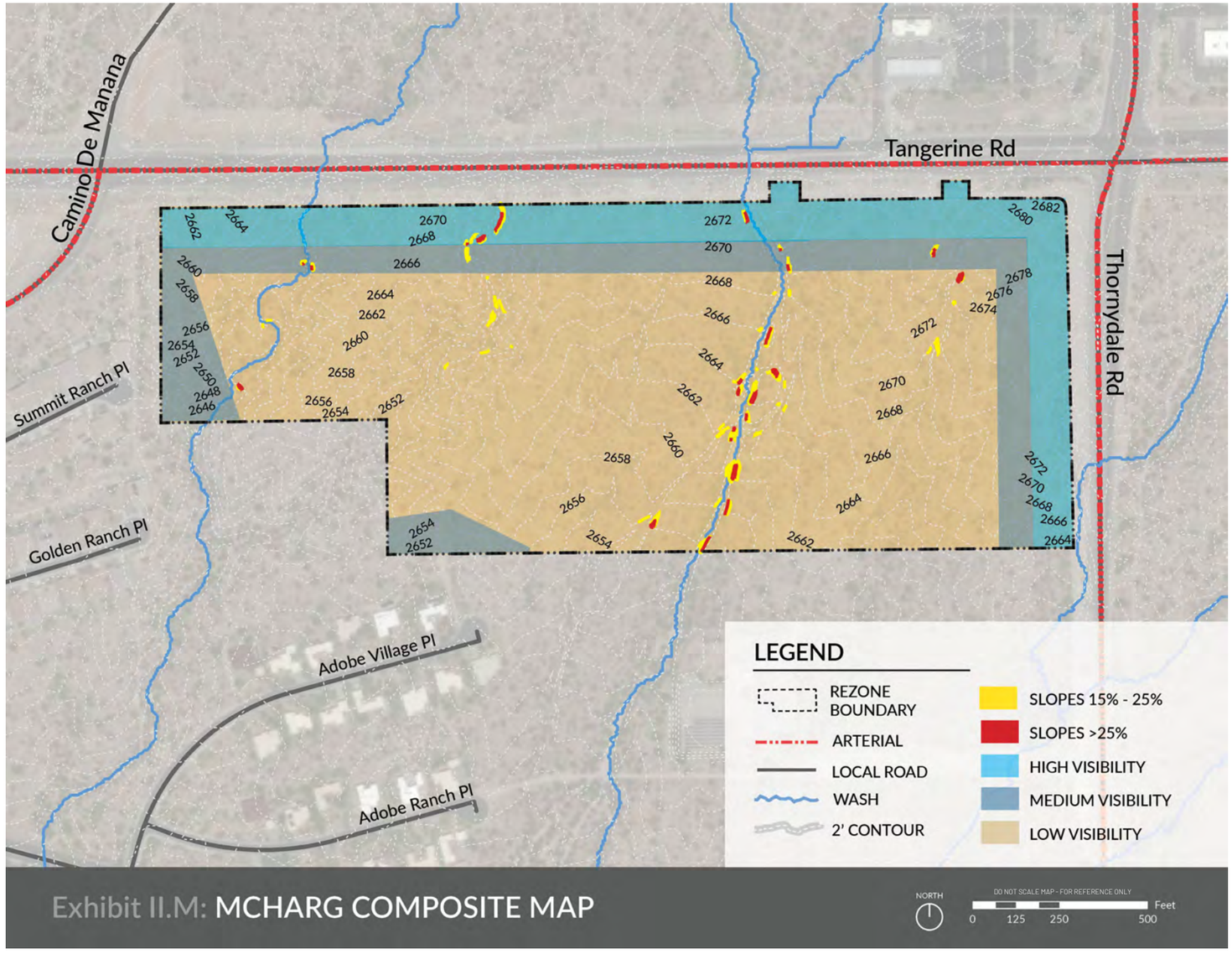


Exhibit II.M: MCHARG COMPOSITE MAP



III. Land Use Proposal

A. Relationship to Adopted Plans

In addition to outlining the land use proposal and providing development guidance for the Property, this Specific Plan serves as an amendment to the Town's General Plan, Make Marana 2040. With this Specific Plan, the Property's designation on the Future Land Use Map is amended to MPA from Commercial. The Specific Plan conforms to the goals and policies of Make Marana 2040, as amended. See Subsections I.B & C for a detailed discussion regarding the Specific Plan's conformance with both the Town's General Plan and its Economic Development Strategy.

B. Compatibility with Surrounding Properties

One of this Specific Plan's primary objectives is to provide thoughtful transitions between new development and existing lower-intensity development within Sky Ranch to the south and Tangerine Road to the north. The southern and western edges of the Specific Plan will include NUOS buffers next to the Sky Ranch boundaries. The existing homes within Sky Ranch are primarily oriented in a northwest/southeast direction to take greatest advantage of the views of the Tortolita and Catalina Mountains. To protect these viewsheds, new residential uses within this Specific Plan are required to be separated from existing Sky Ranch homes' lot lines by at least 300 feet.

The commercial and multi-family residential components of the Project will be located farther away from Sky Ranch and closer to Tangerine and Thornydale Roads where more intense uses and higher densities are appropriate. No commercial uses are permitted within 600 feet of an existing Sky Ranch residential lot line.

C. Land Use

The Specific Plan's land use concept was designed in conformance with the goals and policies of Make Marana 2040 and the Town's Economic Development Strategy, which support commercial and other non-residential land uses along the Tangerine corridor. The Land Use Proposal aims to strike a balance between the development of higher intensity commercial uses at the corner of Tangerine and Thornydale Roads and sensitively placed single-family residential uses as a transition to existing lower-intensity residential communities.

As shown in *Exhibit III.C.1: Land Use Concept*, the Specific Plan features a single land use designations: Mixed-Use ("MU"). The MU designation allows for a multitude of uses, including all uses in the Town's Village Commercial ("VC") zone, as well as single-family residential homes. The homes in this Specific Plan are permitted to be on smaller lots, which is an appropriate transition to Tangerine Road—the Town's largest right-of-way at 250 feet in width. The Property's largest north/south wash (the "Wash") encompasses approximately 1.5 acres and creates a natural divide on the Property: approximately 2/3 on the west and approximately 1/3 on the east. The Wash will be set aside as NUOS.

Because flexibility and response to market conditions are key to the success of this Project, multiple Conceptual Site Plans (*Exhibits III.C.2.a & b*) are included to illustrate the vision for the Specific Plan and demonstrate potential development scenarios. The plans' depictions are conceptual and are not meant to limit development options.

The actual size and location of the lots, buildings, parking and circulation will be determined at time of development plan/preliminary plat preparation. The market will ultimately dictate the mix of uses and the pace of development of the Property.

- *Exhibit III.C.2.a: Conceptual Site Plan #1 ("CSP-1")* – This concept depicts 97 single-family residences on 30.4 acres and features 9.1 acres (or 30%) of NUOS. Multi-family residential uses are shown on 12.1 acres at the southeast corner of the Project, accessible from Thornydale Road and 7.8 acres of commercial uses focused along Tangerine Road, including at its intersection with Thornydale Road.

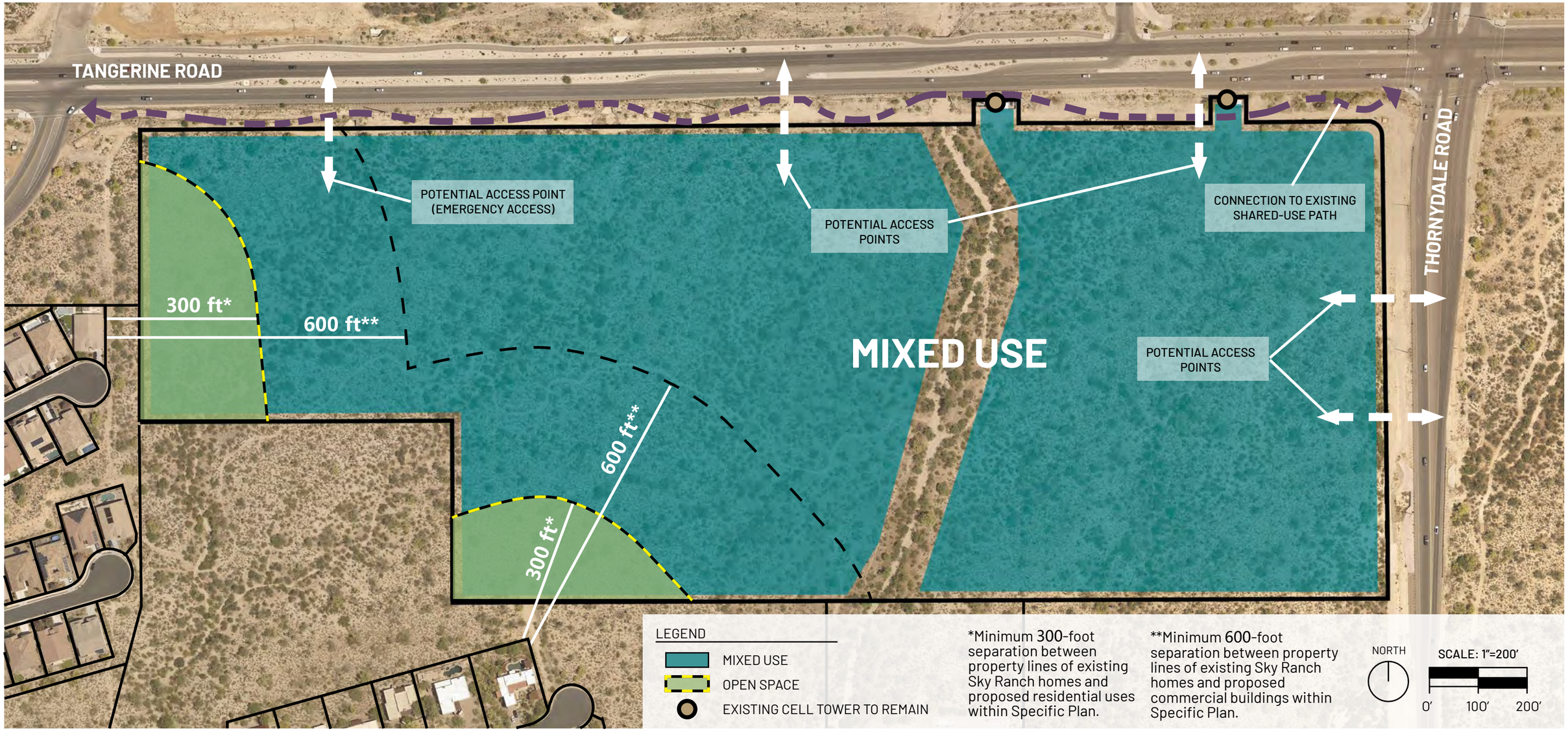
- *Exhibit III.C.2.b: Conceptual Site Plan #2 ("CSP-2")* – This concept shows a single-family residential development with 30% NUOS on the entire area west of the Wash. *CSP-2* features an assisted living facility on 6.5 acres east of the NUOS Wash and 13.4 acres of commercial and office uses along both Tangerine and Thornydale Roads.

- *Exhibit III.C.2.c: Conceptual Site Plan #3 ("CSP-3")* – This concept illustrates single-family residential development across the entire Property.

The two existing wireless communication facilities along the northern Specific Plan boundary adjacent to Tangerine Road are permitted and may remain.

C. Land Use Cont.

Exhibit III.C.1: Land Use Concept



C. Land Use Cont.

Exhibit III.C.2.a: Conceptual Site Plan #1 (CSP-1)



The layout shown is meant to illustrate a potential development scenario. The final land use configuration will be determined during the development plan/platting process.

C. Land Use Cont.

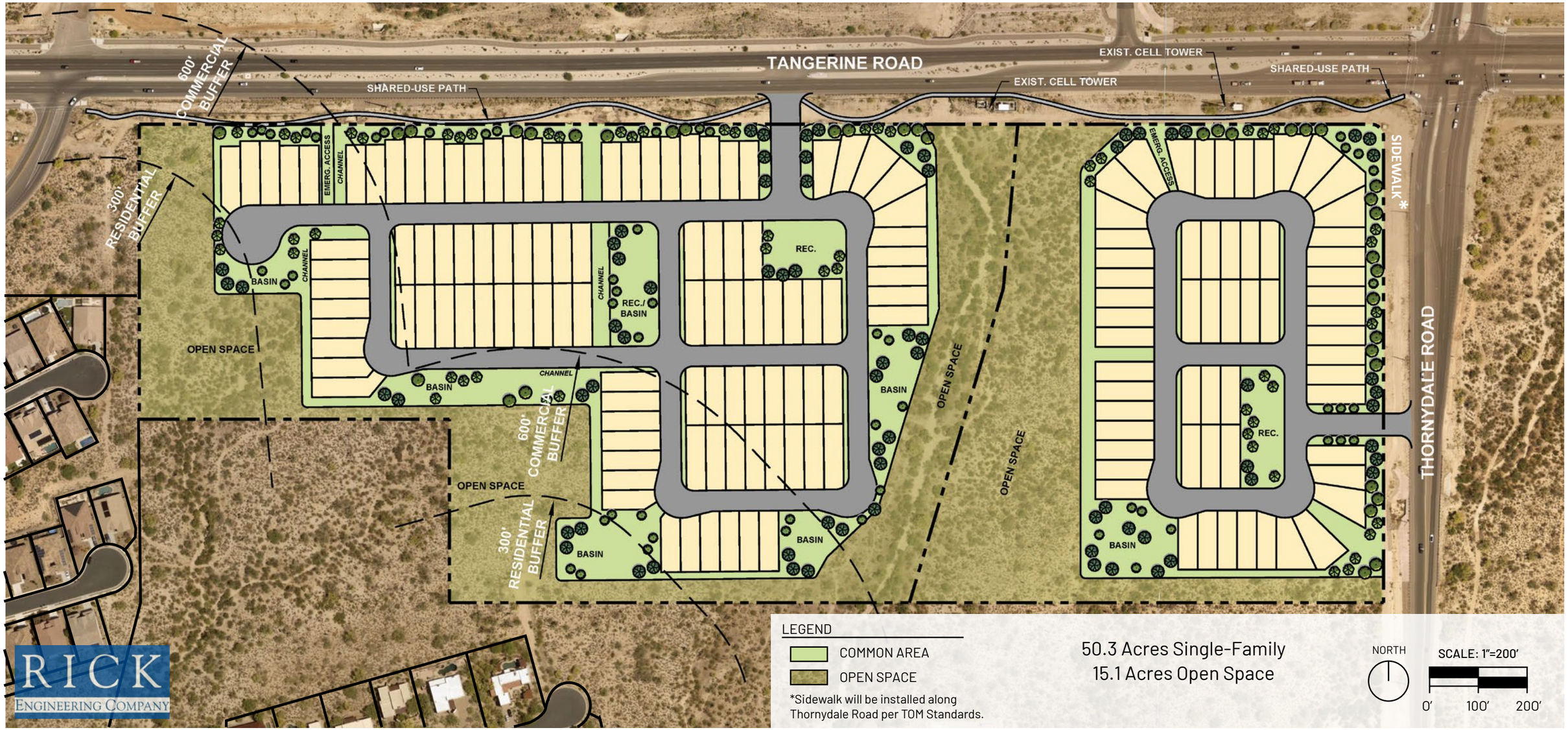
Exhibit III.C.2.b: Conceptual Site Plan #2 (CSP-2)



The layout shown is meant to illustrate a potential development scenario. The final land use configuration will be determined during the development plan/platting process.

C. Land Use Cont.

Exhibit III.C.2.c: Conceptual Site Plan #3 (CSP-3)



The layout shown is meant to illustrate a potential development scenario. The final land use configuration will be determined during the development plan/platting process.

D. Circulation

A Transportation Impact Analysis ("TIA"), provided under separate cover, was prepared by Rick Engineering Company to determine the Specific Plan's potential traffic-related impacts within the Project area. Because final land uses have not yet been determined, the TIA analyzed *CSP-1 (Exhibit III.C.1)*, which features the set of proposed uses with the highest traffic generation. This approach confirms the scenario with the most intense development (in terms of traffic) can be accommodated on the Property and surrounding transportation network, as proposed.

CSP-1 includes:

- 97 single-family residences within 30.4 acres,
- 256 multi-family dwelling units within 12.1 acres,
- 38,000 square feet of general retail and a 2,200 square-foot fast-food restaurant with a drive-thru within 7.8 acres.

For purposes of the TIA, the Project was analyzed assuming the following access points along Tangerine and Thornydale Roads:

- An emergency-only access will be provided on Tangerine Road at the west end of the Project from the single-family residential development. (NOTE: A Design Exception approved by the Town will be required to allow for a single permanent access and a second emergency-only access into a residential subdivision with more than 80 lots.)

- One access point on Tangerine Road at the median break approximately 1300 feet west of the existing Tangerine/ Thornydale intersection will provide full access for both the single-family residential development and the commercial area west of the Wash.

- A right-turn-only driveway about 600 feet west of the Tangerine/Thornydale intersection will be provided for the commercial uses along Tangerine east of the Wash.

- The multi-family residential development that is situated at the east end of the Property will have its primary access along Thornydale Road. Cross-access between the multi-family development and the commercial development to the north will also be provided, as shown in *CSP-1*.

- While not shown on *CSP-1* analyzed for the TIA, there is potential for a secondary right-in/right-out driveway on Thornydale Road south of the Tangerine/Thornydale intersection and north of the primary access point on Thornydale Road. This secondary access is depicted on *CSP-2* and will be part of an analysis at time of development plan submittal if warranted by the final site configuration.

Collectively, the uses proposed for development in *CSP-1* will generate approximately 5,261 daily trips with 314 trips occurring in the AM peak hour and 454 trips occurring during the PM peak hour. The TIA concludes that all the study intersections are anticipated to operate at acceptable levels (LOS D or better) during the AM and PM peak periods with specific improvements outlined in the TIA, which include new and expanded storage for turn lanes on both Tangerine and Thornydale Roads.

E. Open Space & Recreation

As shown on *Exhibit III.C* and illustrated in the conceptual site plans, the Specific Plan features a significant amount of open space. The Wash will continue to provide a naturally vegetated connection between the area north of the Property and the undeveloped land south of the Property via the existing culvert under Tangerine Road. The Wash will be set aside as NUOS with any project within the Specific Plan.

Buffer areas will be incorporated along the south and west edges between the proposed Specific Plan development and the existing Sky Ranch residences. Between new residences and existing Sky Ranch homes there will be a minimum separation of 300 feet (SFR lot line to SFR lot line), and this area will primarily feature existing natural vegetation, which may be enhanced in select areas, as needed. There will be multiple dual-use basins incorporated throughout the area west of the Wash for both detention/retention, as well as active and/or passive recreation opportunities.

Any multi-family residential development will include amenities for its residents, such as a swimming pool, playground, dog park or other outdoor barbecue or gathering space opportunities. Private indoor amenities will also be incorporated into multi-family residential projects.

The final recreation amenities provided within the Specific Plan will be determined at time of development plan/tentative plat submittal and will be provided in conformance with § 17-5-3.B.12 of the Marana Town Code.

The shared-use path along the south side of Tangerine Road will be extended as part of this development from its termination at Camino de Manana to Thornydale Road. The shared-use path will provide residents throughout the Specific Plan access to the Tangerine Sky Community Park less than 0.25 miles to the west of the Property. This path, which will be constructed by the developer in accordance with Town specifications when any portion of the Specific Plan is developed, will connect with the larger regional trail system connecting the Town with unincorporated Pima County and the Town of Oro Valley along the Tangerine corridor. Any easements that may be required will be dedicated at time of development plan or subdivision platting process. A sidewalk will also be installed along the Project frontage of Thornydale Road providing a connection to the shared-use path on Tangerine Road.

F. Topography & Grading

The topography of the Property is conducive to the development of the proposed mixed-use Project. The Project will have minimal areas with excessive cut or fill, with the intent of having a balanced site. The main channel of the Wash will be left natural. Encroachment with erosion protection is proposed along both sides of the Wash. The minor washes on the Property will be graded and channelized in areas outside of the NUOS. No disturbance of these washes is proposed within the NUOS.

G. Hydrology & Drainage

The offsite flows from the four culverts under Tangerine Road and the one under Thornydale Road will be analyzed and accommodated with this development. The nature and quantity of these flows from north to east will be further evaluated in the drainage report that will be prepared for the Project at time of development plan/tentative plat submittal. The necessary improvements to convey the flows through the Property will be determined at that time and will be incorporated into the drainage improvements for the Project. Consultation with the Army Corps of Engineers will be required if the Property is found to contain 404 jurisdictional washes.

The unnamed Wash running within the eastern portion of the Property will maintain natural flow with some development encroachment. The remainder of the Project proposes channelization of flows within the developed areas. The Project will create no drainage impacts to offsite land uses upstream or downstream of the Project.

Retention/detention facilities will be provided throughout the Property in accordance with Town requirements. The quantity and characteristics of flows (e.g., velocity) leaving the Property will match existing conditions.

H. Vegetation

The conceptual site plans provided in Subsection III.C have been designed with consideration for the topography, hydrology, and the xeroriparian Wash that traverses the Property. The majestic views in the immediate vicinity—the Tortolita Mountains to the north, the Santa Catalina Mountains to the east, and the Tucson Mountains to the southwest—will be preserved and given high priority through careful use of vegetative screening. Screening will be accomplished through the use of preserved and planted vegetation, as well as site layout and orientation.

The overall landscape theme will reflect attributes typical of the Sonoran Desert and the vegetation characteristics
in the vicinity. Native and desert-adapted plant materials
(those deemed non-invasive in character and low water use) and regionally appropriate hardscape will be used wherever possible. Buffer and common areas will reflect the plant palette and appearance of the environment on and near the Property.

The landscape design will prioritize the conservation of water through implementation of underground drip irrigation, reducing evaporative water loss, and integration of low-water-use plants in selected common area whenever possible. Passive water harvesting techniques, such as strategic grading in parking areas and capturing rooftop runoff into swales to direct rainwater into landscaped areas will be employed wherever possible. Rainwater that is collected or diverted will supplement the water requirements of the landscape plants.

Plants that have been proven to have the potential for invasive characteristics will be prohibited in public common areas and on private property (front, back or side yards). In addition, select vegetation along washes may be removed for fire prevention, invasive species maintenance and safety of residents.

I. Wildlife

No federally listed species or other special-status species were detected or observed on the Property. Although not detected, the Sonoran desert tortoise (a Candidate for ESA protection and State-protected) and Gila monster (State-protected) have some potential to move through the Property, most notably along the large Wash identified in the Site Resource Inventory (*Exhibit II.E.2*). This Wash traverses the Property and continues well beyond its boundaries both north and south. Wildlife connectivity will be maintained through avoidance of vegetation removal along the large Wash and maintenance of the existing box culvert in the immediate vicinity of the Property. Box culverts discharging to the Property under Tangerine Road will remain open and clear before, during, and after construction activities.

To further maintain existing wildlife connectivity potential through the property, appropriate outdoor lighting (namely low voltage or similar landscape fixtures) will be applied to buildings, whenever possible, especially those adjacent to the existing wash. Lighting options will be low voltage, whenever possible, and directed away from the wash so as not to disrupt nightly wildlife travel.

Additional measures will be applied to reduce impacts to local wildlife. AGFD requires a 100% clearance survey for the Sonoran desert tortoise to be completed by a qualified biologist prior to issuance of a grading permit. Individuals encountered would be relocated following AGFD relocation protocols.

J. Public Services

1. Utilities

a. Sewer

The Property is tributary to the Tres Rios Water Reclamation Facility via the Canada del Oro Interceptor. Capacity is currently available for the western portion of the site from the public sewer G-2003-057, downstream from manhole 3712-38 from the Sky Ranch subdivision to the south. Capacity is currently available for the eastern portion of the site from the public sewer G-2004-171, downstream from manhole 3471-07 adjacent to the west side of Thornydale Road. A sewer service agreement will be needed prior to development of the Project. (See *Exhibit II.L.1.a.1: PCRWRD Capacity Response Letter*.)

Exhibit III.J.1.a: Proposed Sewer Connections identifies sewer connection points for development on east and west sides fo the Wash.

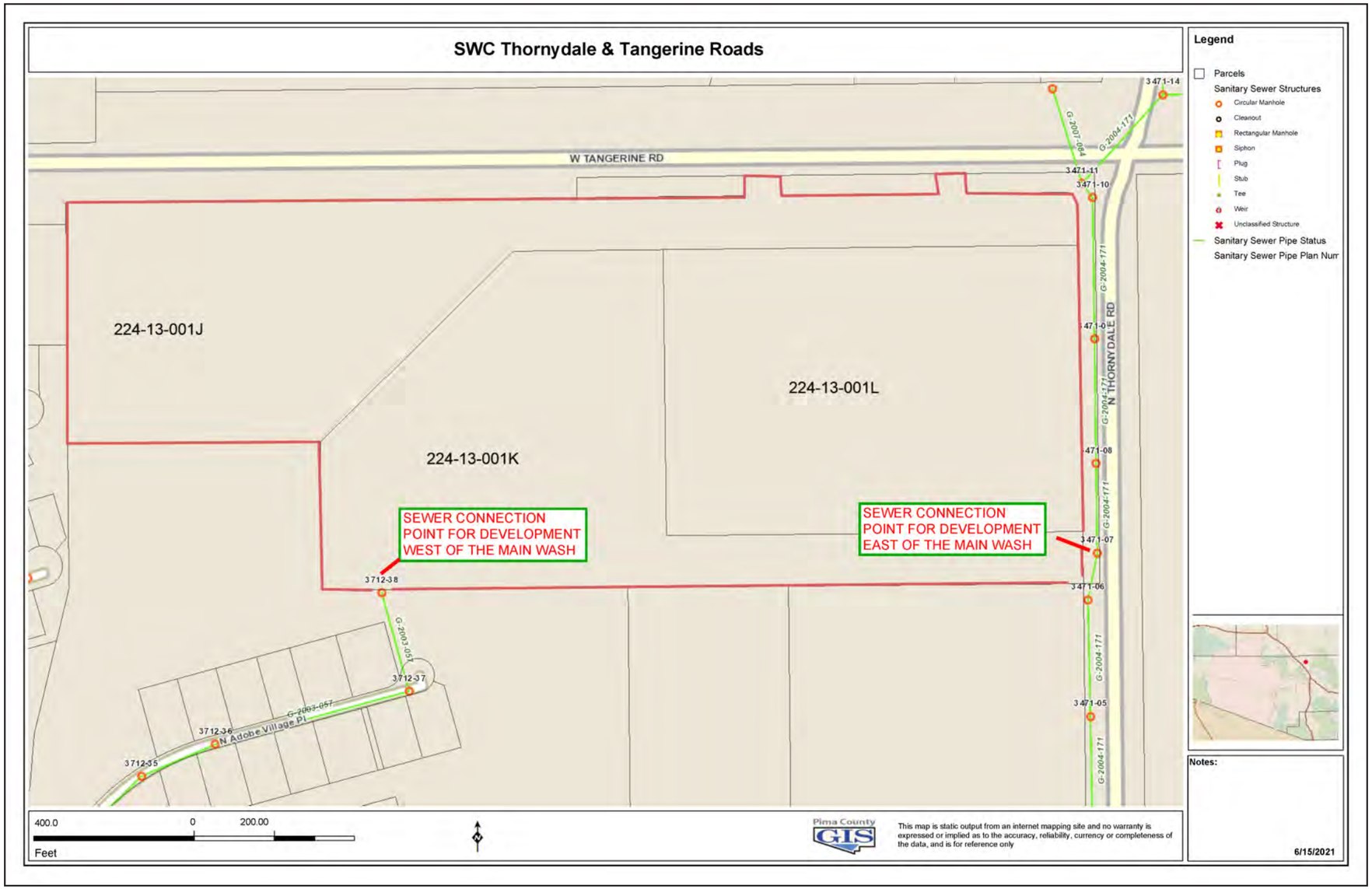
b. Water

The water supply for the Project will be provided by Tucson Water, which has been designated by Arizona Department of Water Resources as having an assured water supply. A water service agreement is required to establish service to the Project. (See *Exhibit II.L.1.b.1: Tucson Water Availability Letter.*)

Exhibit III.J.1.b: Proposed Water Connections identifies the schematic water system loop and connection points.

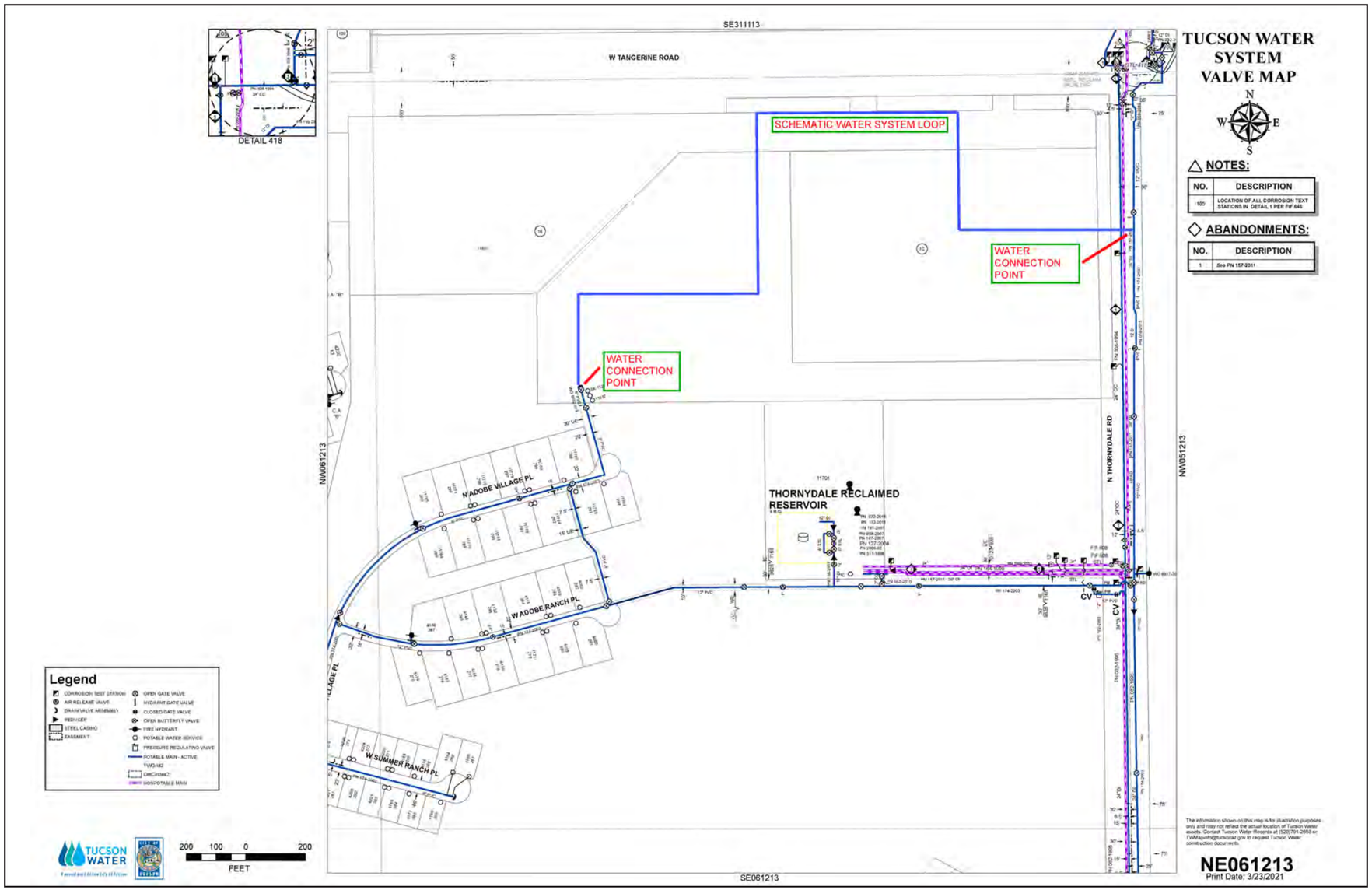
J. Public Services Cont.

Exhibit III.J.1.a: Proposed Sewer Connections



J. Public Services Cont.

Exhibit III.J.1.b: Proposed Water Connections



J. Public Services Cont.

2. Fire Service

The Project will be served by Northwest Fire District. The closest fire station is Station 339 located at 12095 N. Thornydale Road, approximately one-quarter mile north of the Property.

3. Schools

The Property is located within Marana Unified School District ("MUSD"). MUSD estimates this Project will generate approximately 59 elementary and 27 secondary students. (*See Exhibit III.J.3: MUSD Letter*.) The future students will be able to attend Dove Mountain CSTEM K-8, Tortolita Middle School and Mountain View High School, all of which have capacity to absorb the impact of this Project.

K. Cultural, Archaeological & Historic Resources

A Cultural Resources Inventory ("CRI") was performed by WestLand Resources, Inc. to identify potential environmental, historic or cultural impacts on the Property. The CRI identified two prehistoric cultural remains (an artifact scatter and one projectile point) on the Property. No historic artifacts or features were identified. No National Register of Historic Places-eligible sites were identified. WestLand Resources, Inc. concluded that no historic properties will be adversely impacted by the Project.

A qualified archaeologist will consult with the Army Corps of Engineers and make appropriate recommendations if the Property is found to contain 404 jurisdictional washes. No further archaeological work is recommended at this time.

J. Public Services Cont.

Exhibit III.J.3: MUSD Letter

GOVERNING BOARD
Maribel Lopez, Ed.D., President
Hunter Holt, Vice President
Tom Carlson, Member
John Lewandowski, Member
Dan Post, Member

MARANA
UNIFIED SCHOOL DISTRICT

ADMINISTRATION
Daniel Streeter, Ed.D., Superintendent
Carolyn Dumler, Ed.D., Assistant Superintendent
Kristin Reidy, Assistant Superintendent
Dan Contorno, Chief Financial Officer

May 5, 2021

Robin Large
Senior Land Planner
Lazarus & Silvyn, P.C.

RE: Proposed Development Tangerine and Thornydale

Dear Ms. Large,

Thank you for informing us of the proposed 50.46 acre development south of Tangerine and west of Thornydale on parcels 22413001J, 22413001L, and 22413001k. Marana Unified School District currently uses a factor of .25 students per home for elementary and .1 students per home for secondary. We use lower factors of .1 students per apartment for elementary and .05 students per apartment for secondary. The 110 homes and 310 apartments could generate about 59 elementary and 27 secondary students.

These future potential students can be supported by the following schools with their current enrollment/capacity numbers shown; Dove Mountain CSTEM K-8 (884/1000), Tortolita Middle School (577/1234) and Mountain View High School (1817/2257). All schools have capacity for the impact this proposed development may have on our student population under current conditions.

Thank you for supporting the development of quality homes and businesses in our community. Marana Unified School District knows that one of the keys to the continued success of our wonderful community is the quality of our children's education. This belief is held so strongly that we have multiple developers providing the school district with rooftop impact development fees. The district uses these funds to ensure that necessary infrastructure is in place to support growth and maintain an inspiring education for every child. Voluntary developer participation in this process is an invaluable investment in our community. Please contact the Marana Schools Finance Office at 520-682-4756 to learn more about participation.

Please contact Dan Contorno at 520-682-4756, or myself at 520-616-4521 if you have any further questions.

Sincerely,

R Federico

Russell Federico, M.Ed.
Executive Director of Bond and Capital Projects
Marana Unified School District

Inspiring students to learn today and lead tomorrow.

11279 W. Grier Road • Marana, Arizona 85653 • (520) 682-3243 • www.maranausd.org



IV. Development & Design Regulations

A. Applicability & Design Regulations

The standards and guidelines contained within this Specific Plan shall supersede the standards within the Town Code and Land Development Code ("LDC"). If an issue, situation, or condition arises that is not addressed by this Specific Plan, the applicable portions of the Town Code and the LDC that are in place at the time of development shall apply.

All construction and development within the Specific Plan area shall comply with applicable provisions of various codes and regulations adopted by the Town including, but not limited to, building, fire and lighting codes current at the time of development.

B. Permitted Land Uses

The Zoning Administrator may permit any use not specifically listed in this section if determined to be similar in nature and/or complementary to other permitted uses within the Specific Plan. The following uses are permitted within the Specific Plan:

1. Residential, including both single-family and multi-family uses, and related accessory structures
2. All uses permitted in the Town's Village Commercial ("VC") zone, subject to Table 3: Conditions Per Use in LDC § 17-4-3.
3. Food processing facility (e.g., microbrewery, bakery, etc.) when operated in conjunction with a restaurant or bar.
4. Existing wireless communication facilities may remain.

C. Site Development Standards

1. Single-Family Residential

a. Minimum Lot Area: 4,000 square feet

b. Minimum Lot Width & Depth: none

c. Maximum Lot Coverage: 75%

d. Maximum Building Height: 30 feet

(1) No more than 60% of the homes may be 2-stories.

(2) No more than two 2-story homes may be located side-by-side on the same street.

e. Maximum Residential Density: 3.5 RAC

f. Minimum Building Setbacks

(1) Front

- To livable area: 10 feet
- To front-facing garage: 20 feet
- To side-loaded garage: 10 feet
- To non-livable area (e.g., patio structure): 10 feet
- To side abutting street on corner lot: 10 feet

(2) Side: per building code

(3) Rear: 10 feet, except for the following:

- A minimum setback of five (5) feet shall be maintained from the rear and side property lines for an attached patio structure that is open and unenclosed on three (3) sides, as measured to the structure.

(4) Accessory Structures: per building code

g. Minimum Building Separation

(1) Between SFRs within Specific Plan: per building code
(2) Between Specific Plan SFR lot line and Sky Ranch SFR lot line: 300 feet

h. Minimum Open Space

(1) A minimum of 30% of any single-family residential project shall be maintained as NUOS.

2. Multi-Family Residential & Commercial

a. Minimum Site Area: none

b. Maximum Site Coverage: 75%

c. Maximum Building Height: 40 feet

d. Maximum Residential Density: 25 RAC

e. Minimum Perimeter Setbacks:

(1) 25 feet from Tangerine & Thornydale Roads
(2) Adjacent to more intense use: 0 feet
(3) Adjacent to same or less intense use: 10 feet

- For purposes of determining more/less intense use, generalized land use categories are listed below in order of most to least intense:
  - Retail/commercial
  - Office/multi-family residential
  - Single-family residential

f. Minimum Building Separation

(1) Between buildings withing Specific Plan: per building code
(2) Between Specific Plan commercial buildings and Sky Ranch SFR lot line: 600 feet

D. Vehicular & Bicyle Parking

Vehicular and bicycle parking will be provided in accordance with Town Code § 17-9 (Parking).

E. Solid Waste & Recycling

To be contracted with private service provider.

F. Bufferyards & Screening

Development within the Specific Plan shall comply with Town Code § 17-11-7 (Landscape Requirements) except as provided herein.

(1) Adjacent to Tangerine & Thornydale Roads: 10-foot bufferyard with 36-inch screen wall in vehicular parking areas that face Tangerine and Thornydale Roads
(2) Adjacent to open space: none required
(3) Adjacent to more intense use: none required
(4) Adjacent to same or less intense use: 10-foot bufferyard with 5-foot screen

- For purposes of determining more/less intense use, generalized land use categories are listed below in order of most to least intense:

    - Retail/commercial
    - Office/multi-family residential
    - Single-family residential

G. Lighting

This Project is committed to “Dark Skies” principles and the Town’s Outdoor Lighting Code (“OLC”), which requires shielded lighting that does not spill over onto adjacent properties. A lighting plan will be prepared and submitted with the Project’s building permit plans in accordance with the OLC’s permit submission requirements.

H. Signage

Signage will be designed and permitted in accordance with Town Code § 17-10: Signs, except that no lighted wall signs are permitted on the west and south faces of non-residential buildings within 800 feet of the southern Property line.

Address and unit number signage will be incorporated per Town Addressing requirements.

I. Design Guidelines

Unless otherwise provided in this Specific Plan, single-family residential projects within the Specific Plan will comply with the Town’s Residential Design Standards (LDC § 17-7).

Unless otherwise provided in this Specific Plan, multi-family residential and commercial projects within the Specific Plan will comply with the Town’s Multi-Family, Commercial and Industrial Design Standards (LDC § 17-8).

V. Implementation & Administration

A. Administration & Interpretation

The Specific Plan shall be administered by the Town's Zoning Administrator, and all implementation decisions shall be based on the purpose of the Specific Plan. If a conflict arises between the Specific Plan and the Land Development Code ("LDC"), the Specific Plan shall control. If the Specific Plan is silent on any issue, and the LDC is consulted, the purpose and intent of the Specific Plan shall control the Zoning Administrator's decision whether and how to apply the LDC. Appeals of any Zoning Administrator interpretation of this Specific Plan may be made to the Mayor & Council within 15 days of the date of the interpretation. The Specific Plan will not result in the modification or change of any existing Town-adopted building codes.

B. Amendments

The Zoning Administrator may administratively approve minor (or insubstantial) changes, as defined in § 17-4-15(D) of the Marana Town Code, provided such changes are in conformance with the overall intent, goals and objectives of the Specific Plan as presented herein.

Major (or substantial) amendments to the Specific Plan shall be those changes or modifications that materially alter the guiding goals and objectives as presented in the Specific Plan. Major amendments to the Specific Plan shall be processed in accordance with § 17-3-1 of the Marana Town Code.

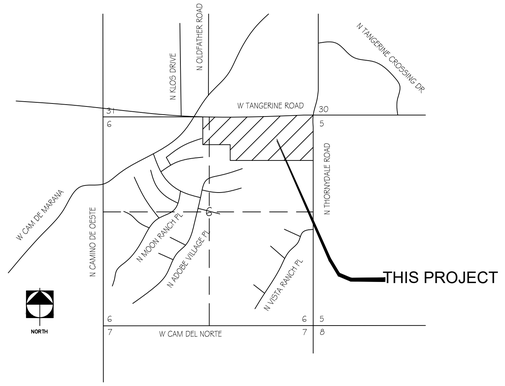


VI. Appendices

Appendix A: Site Resource Inventory

SHEET LAYOUT OVERVIEW





LOCATION MAP

A PORTION OF SECTION 6 T12S – R13E,
G.&S.R.M. PIMA COUNTY, ARIZONA.
3" = 1 MILE

SITE RESOURCE INVENTORY

The property includes Pima County Assessor's Parcels 224-13-001J, K, and L; a total of 50.91 acres of undeveloped land. Thornydale Road and Tangerine Road, both major local thoroughfares, define the east and north boundaries of the property, respectively. The Skyranch subdivision abuts the property to the west and south. The southern boundary of the property also is adjacent to a City of Tucson booster station.

Vegetation: The property supports an Arizona Upland subdivision of the Sonoran Desertscrub plant community typical of the upper Tortolita Fan. Trees include foothill and blue palo verde (*Parkinsonia microphylla* and *P. florida*), velvet mesquite (*Prosopis velutina*), and desert ironwood (*Olneya tesota*); the shrub layer is represented by wolfberry (*Lycium* sp.), desert hackberry (*Celtis spinosa*), graythorn (*Ziziphus obtusifolia*), whitethorn acacia (*Vachellia constricta*), jointfir (*Ephedra* sp.), and creosotebush (*Larrea tridentata*), among other species; cacti include saguaro (*Carnegiea gigantea*), barrel cactus (*Ferocactus wislizeni*), hedgehog cactus (*Echinocereus* sp.), pincushion cactus (*Mammillaria grahamii*), cholla (*Cylindropuntia* spp.), and prickly pear (*Opuntia* spp.); and triangle-leaf bursage (*Ambrosia deltoidea*) is a common sub-shrub component.

There are:

- No Peaks
- No Ridges
- No Rock Outcroppings
- No 100 year floodplain
- No Steep Hillsides
- No Significant Vegetation
- No Unique Plant communities

Riparian Areas and Wildlife Corridor: Four wash channels on the property support a vegetation community that is denser than that on the surround uplands, but composed of most of the same species. This xeroriparian vegetation on the two western riparian areas begins to develop less than 1,000 feet north of the property and on the easternmost riparian area begins development on the property. The east-central riparian area is the only one with connectivity extending to the foothills of the Tortolita Mountains, providing a corridor for wildlife movement, although the approximately 270-foot width of Tangerine Road with its cleared vegetation lateral to the road could present a deterrent to wildlife movement.

north

120' 0' 120'
SCALE: 1" = 120'

Total Site Area: 50.91 ac. (2,217,639.6sf)

LEGEND

PROJECT BOUNDARY
PARCEL BOUNDARY
SHEET MATCHLINE
RIPARIAN AREA
WILDLIFE CORRIDOR

DESIGNED BY: RAC
DRAWN BY: RAC
CHECKED BY: RWS
DRAWING SCALE(S):

Westland Resources
4001 E. Paradise Falls Drive
Tucson, Arizona 85712
(520) 206-9585

REVISIONS

NO.	BY	DESCRIPTION	APP'D	DATE

TANGERINE AND THORNYDALE ROADS
SITE RESOURCE INVENTORY

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
10101
RICHARD W. SCHONFELD
Signed 02.26.21
ARIZONA, U.S.A.

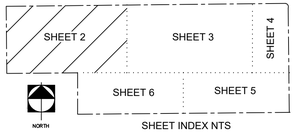
PLAN DATE: FEBRUARY 26, 2021
PROJECT NUMBER: 2223.01
SHEET NO.
COVER
1 OF 6

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north

40' 0' 40'
SCALE: 1" = 40'



SHEET INDEX NTS

LEGEND

PROJECT BOUNDARY
SHEET MATCHLINE
WILDLIFE CORRIDOR
PARCEL BOUNDARY
RIPARIAN AREA

DESIGNED BY: RAC
DRAWN BY: RAC
CHECKED BY: RWS
DRAWING SCALE(S):

Westland Resources
4001 E. Paradise Falls Drive
Tucson, Arizona 85712
(520) 206-9585

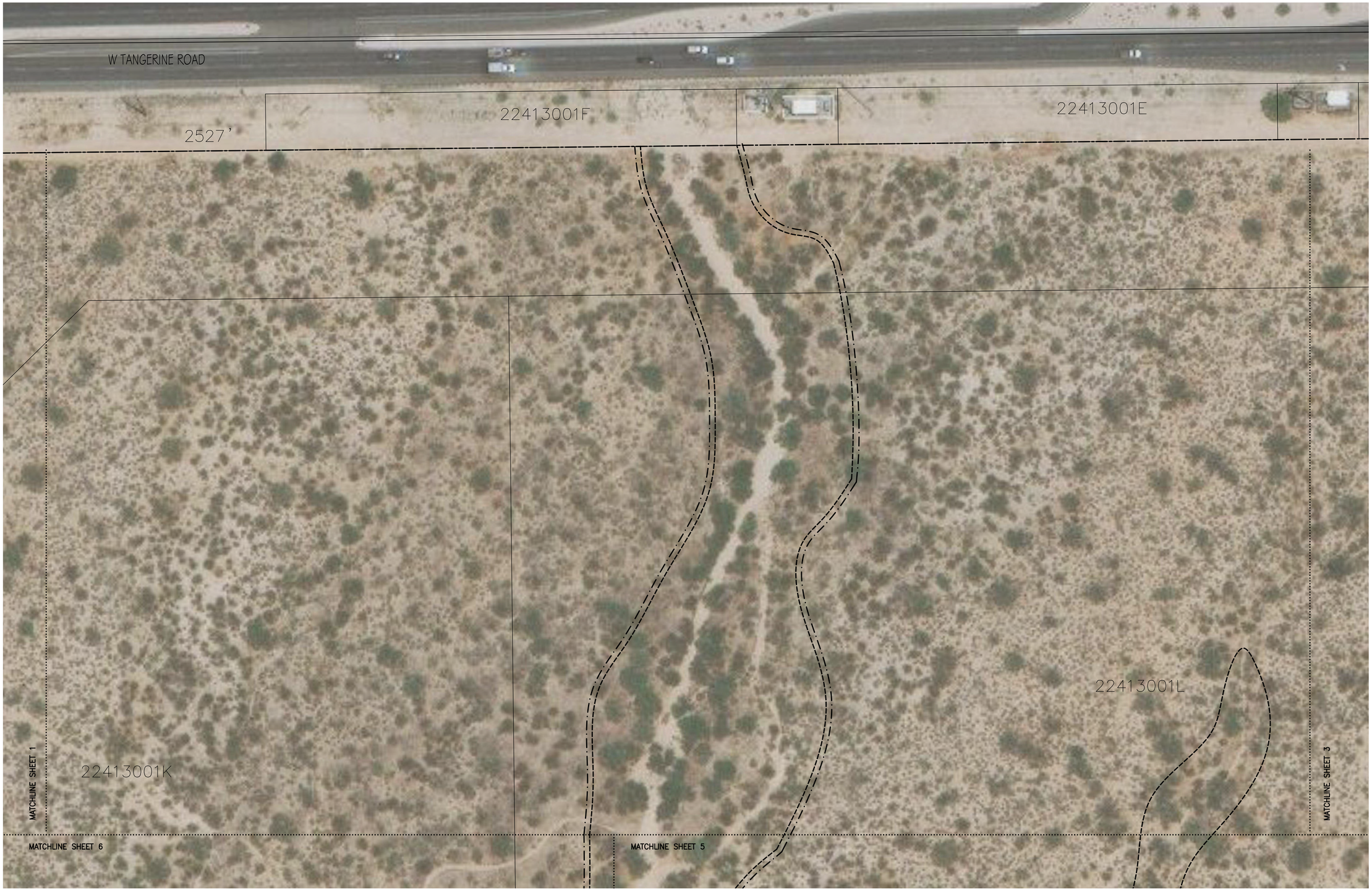
REVISIONS

NO.	BY	DESCRIPTION	APP'D	DATE

TANGERINE AND THORNYDALE ROADS
SITE RESOURCE INVENTORY

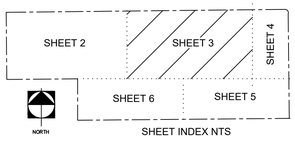
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PROJECT NUMBER: 2223.01
SHEET NO.
SHEET 2 OF 6

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north

40' 0' 40'
SCALE: 1" = 40'



SHEET INDEX NTS

LEGEND

PROJECT BOUNDARY
SHEET MATCHLINE
WILDLIFE CORRIDOR
PARCEL BOUNDARY
RIPARIAN AREA

DESIGNED BY: RAC
DRAWN BY: RAC
CHECKED BY: RWS
DRAWING SCALE(S):

Westland Resources
4001 E. Paradise Falls Drive
Tucson, Arizona 85712
(520) 206-9585

REVISIONS

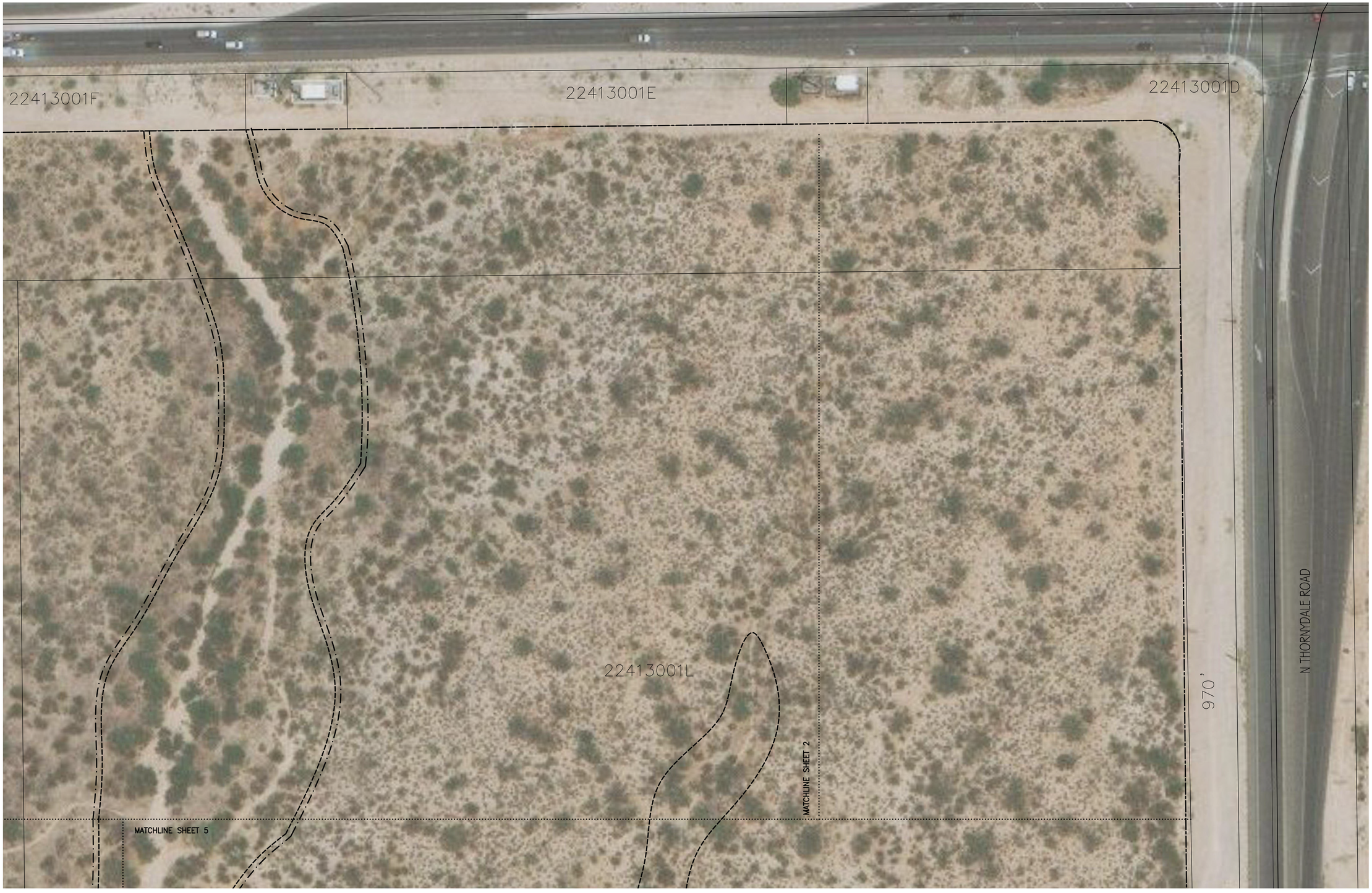
NO.	BY	DESCRIPTION	APP'D	DATE

TANGERINE AND THORNYDALE ROADS

SITE RESOURCE INVENTORY

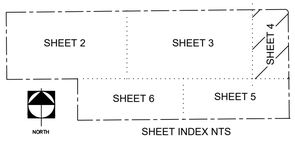
PLAN DATE: FEBRUARY 26, 2021
PROJECT NUMBER: 2223.01
SHEET NO.
SHEET 3 OF 6

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north

40' 0' 40'
SCALE: 1" = 40'



SHEET INDEX NTS

LEGEND

PROJECT BOUNDARY
SHEET MATCHLINE
WILDLIFE CORRIDOR
PARCEL BOUNDARY
RIPARIAN AREA

DESIGNED BY: RAC
DRAWN BY: RAC
CHECKED BY: RWS
DRAWING SCALE(S):

Westland Resources
4001 E. Paradise Falls Drive
Tucson, Arizona 85712
(520) 206-9585

REVISIONS

NO.	BY	DESCRIPTION	APP'D	DATE

TANGERINE AND THORNYDALE ROADS
SITE RESOURCE INVENTORY

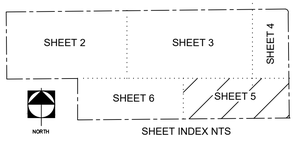
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PROJECT NUMBER: 2223.01
SHEET NO. SHEET 4 OF 6

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north

40' 0' 40'
SCALE: 1" = 40'



SHEET INDEX NTS

LEGEND

PROJECT BOUNDARY
SHEET MATCHLINE
WILDLIFE CORRIDOR
PARCEL BOUNDARY
RIPARIAN AREA

DESIGNED BY: RAC
DRAWN BY: RAC
CHECKED BY: RWS
DRAWING SCALE(S):

Westland Resources
4001 E. Paradise Falls Drive
Tucson, Arizona 85712
(520) 206-9585

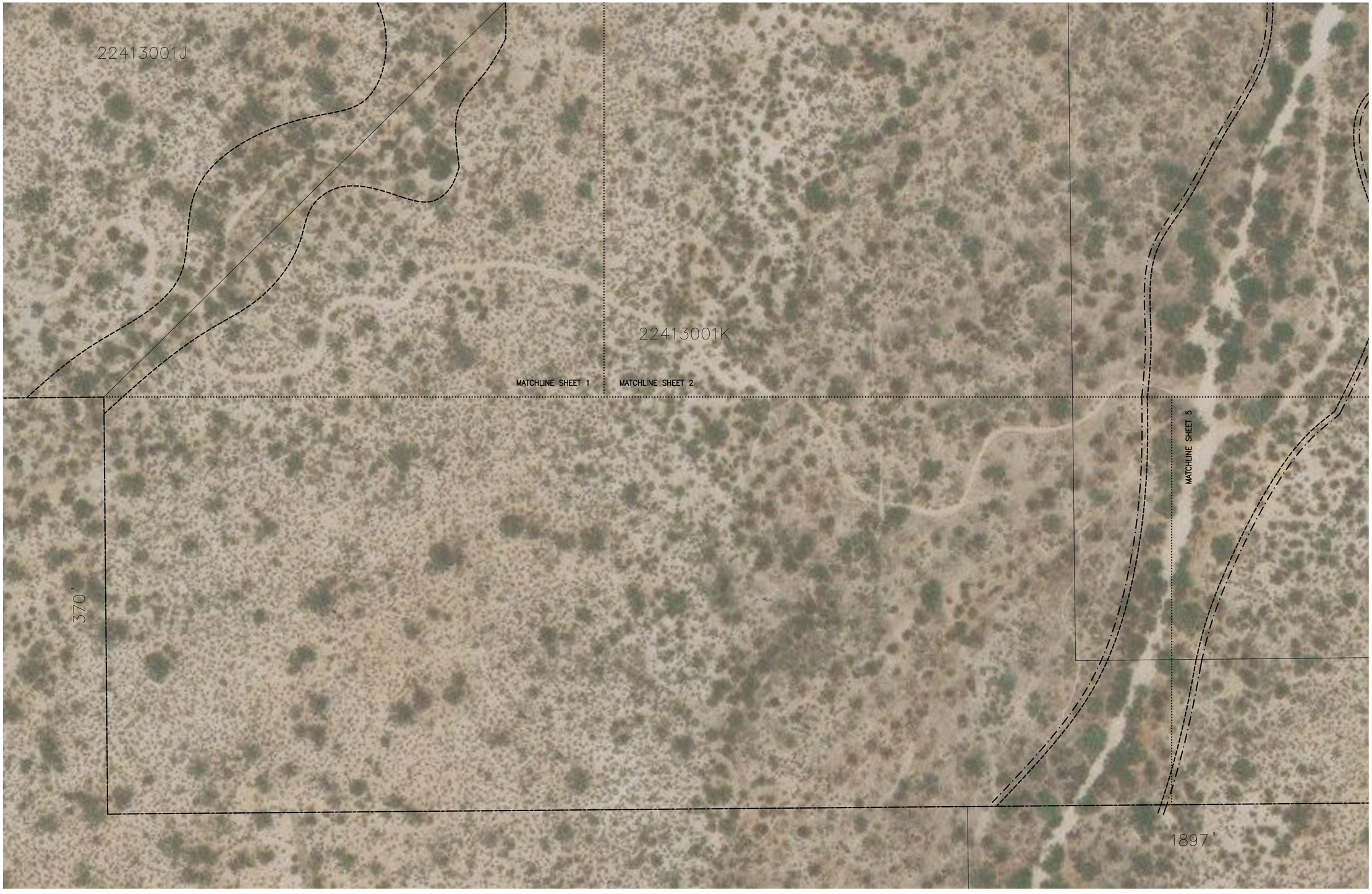
REVISIONS

NO.	BY	DESCRIPTION	APP'D	DATE

TANGERINE AND THORNYDALE ROADS
SITE RESOURCE INVENTORY

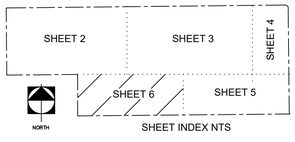
PLAN DATE: FEBRUARY 26, 2021
PROJECT NUMBER: 2223.01
SHEET NO.
SHEET 5 OF 6

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north

40' 0' 40'
SCALE: 1" = 40'



SHEET INDEX NTS

LEGEND

PROJECT BOUNDARY
SHEET MATCHLINE
WILDLIFE CORRIDOR
PARCEL BOUNDARY
RIPARIAN AREA

DESIGNED BY: RAC
DRAWN BY: RAC
CHECKED BY: RWS
DRAWING SCALE(S):

Westland Resources
4001 E. Paradise Falls Drive
Tucson, Arizona 85712
(520) 206-9585

REVISIONS

NO.	BY	DESCRIPTION	APP'D	DATE

TANGERINE AND THORNYDALE ROADS
SITE RESOURCE INVENTORY

PLAN DATE: FEBRUARY 26, 2021
PROJECT NUMBER: 2223.01
SHEET NO. SHEET 6 OF 6

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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:
Thornydale and Tangerine

Project Description:
Residential Development

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

Contact Person:
Gabrielle Diamond

Organization:
Private Consulting Firm

On Behalf Of:
CONSULTING

Project ID:
HGIS-13252

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

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.

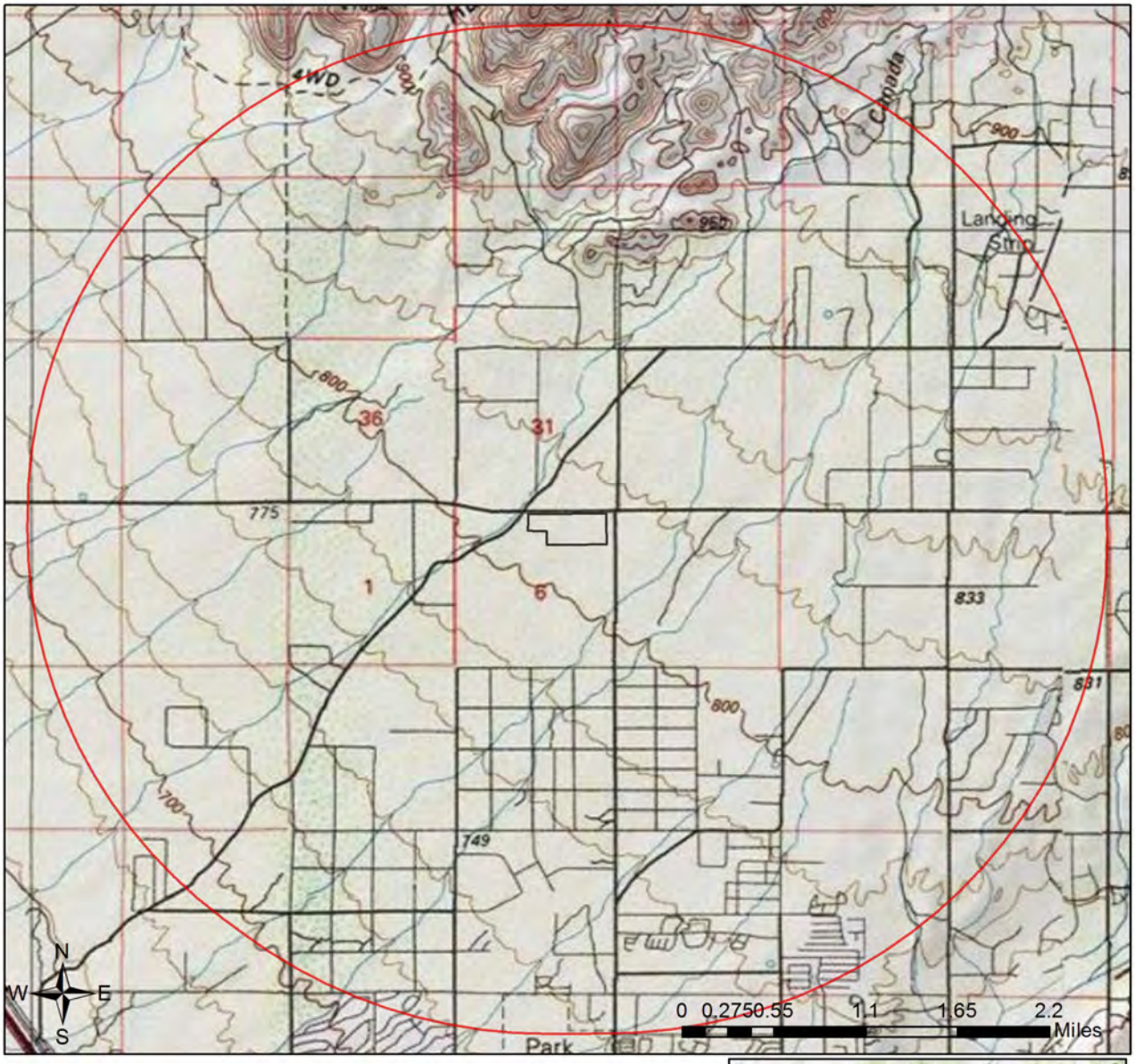
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

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

Thornydale and Tangerine

USA Topo Basemap With Locator Map



Project Boundary

Buffered Project Boundary

Project Size (acres): 51.06

Lat/Long (DD): 32.4222 / -111.0510

County(s): Pima

AGFD Region(s): Tucson

Township/Range(s): T12S, R13E

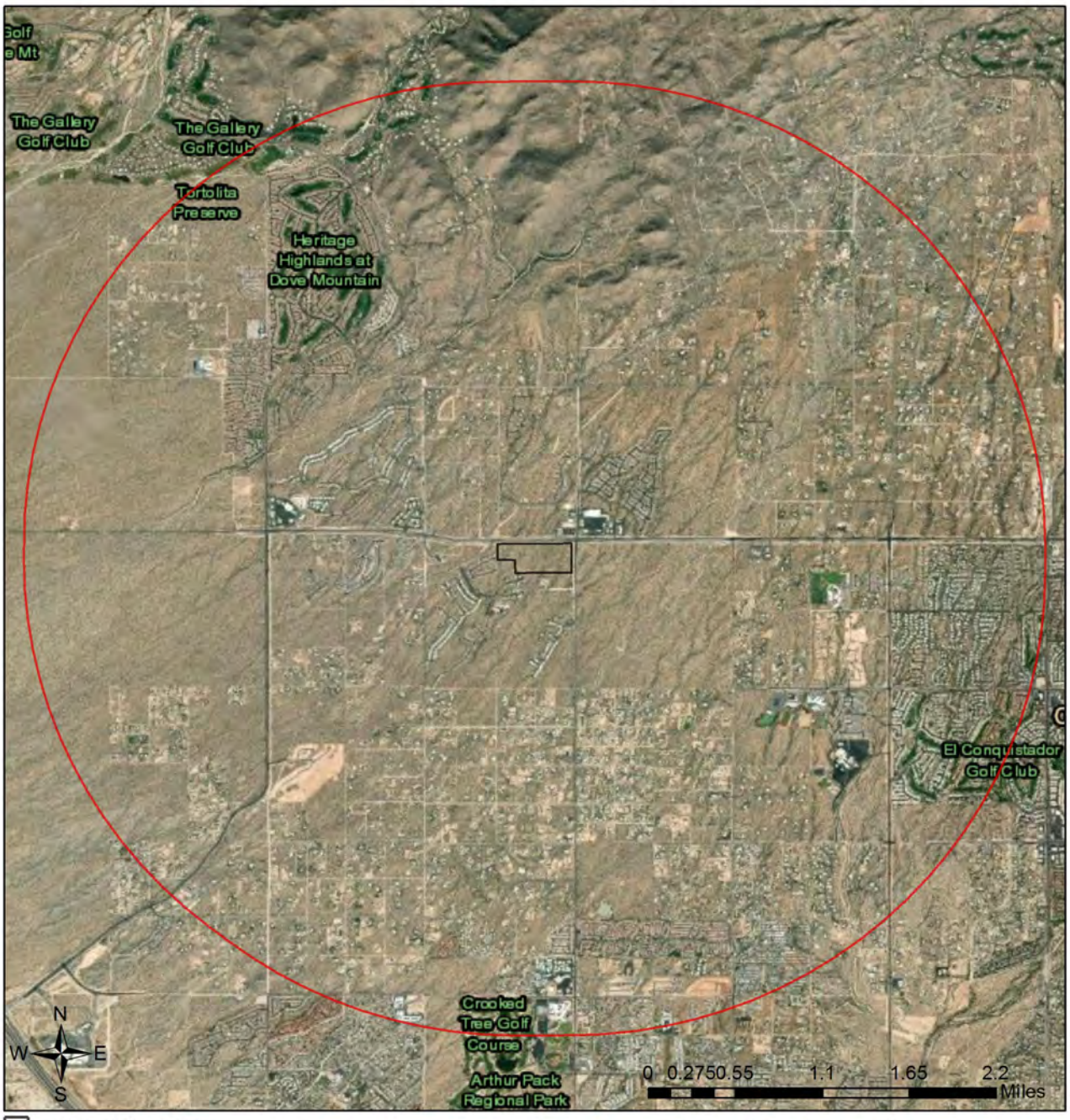
USGS Quad(s): RUELAS CANYON



Service Layer Credits: 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

Thornydale and Tangerine

Web Map As Submitted By User



Project Boundary

Buffered Project Boundary

Project Size (acres): 51.06

Lat/Long (DD): 32.4222 / -111.0510

County(s): Pima

AGFD Region(s): Tucson

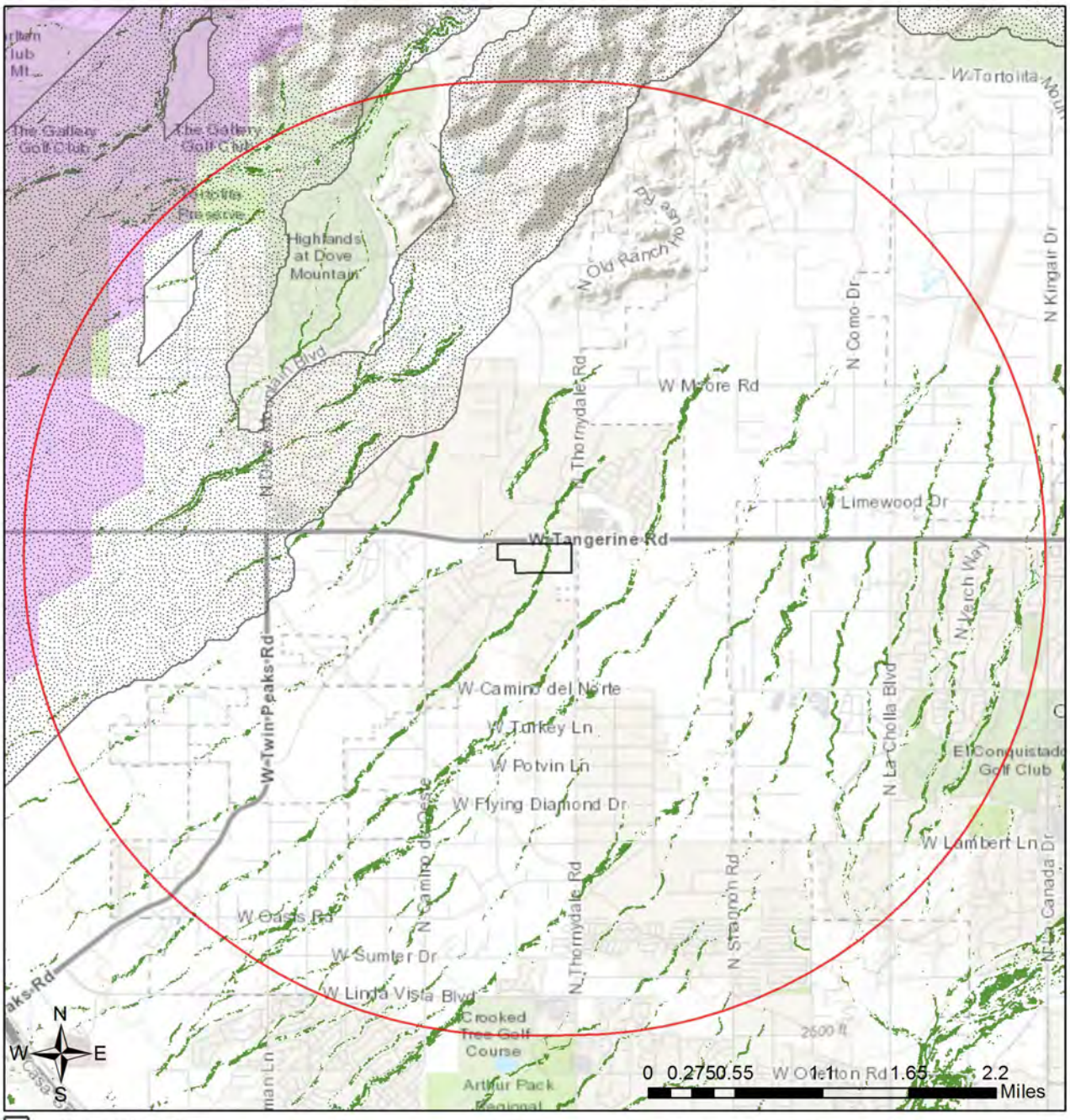
Township/Range(s): T12S, R13E

USGS Quad(s): RUELAS CANYON

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

Thornydale and Tangerine

Important Areas



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

Project Size (acres): 51.06

Lat/Long (DD): 32.4222 / -111.0510

County(s): Pima

AGFD Region(s): Tucson

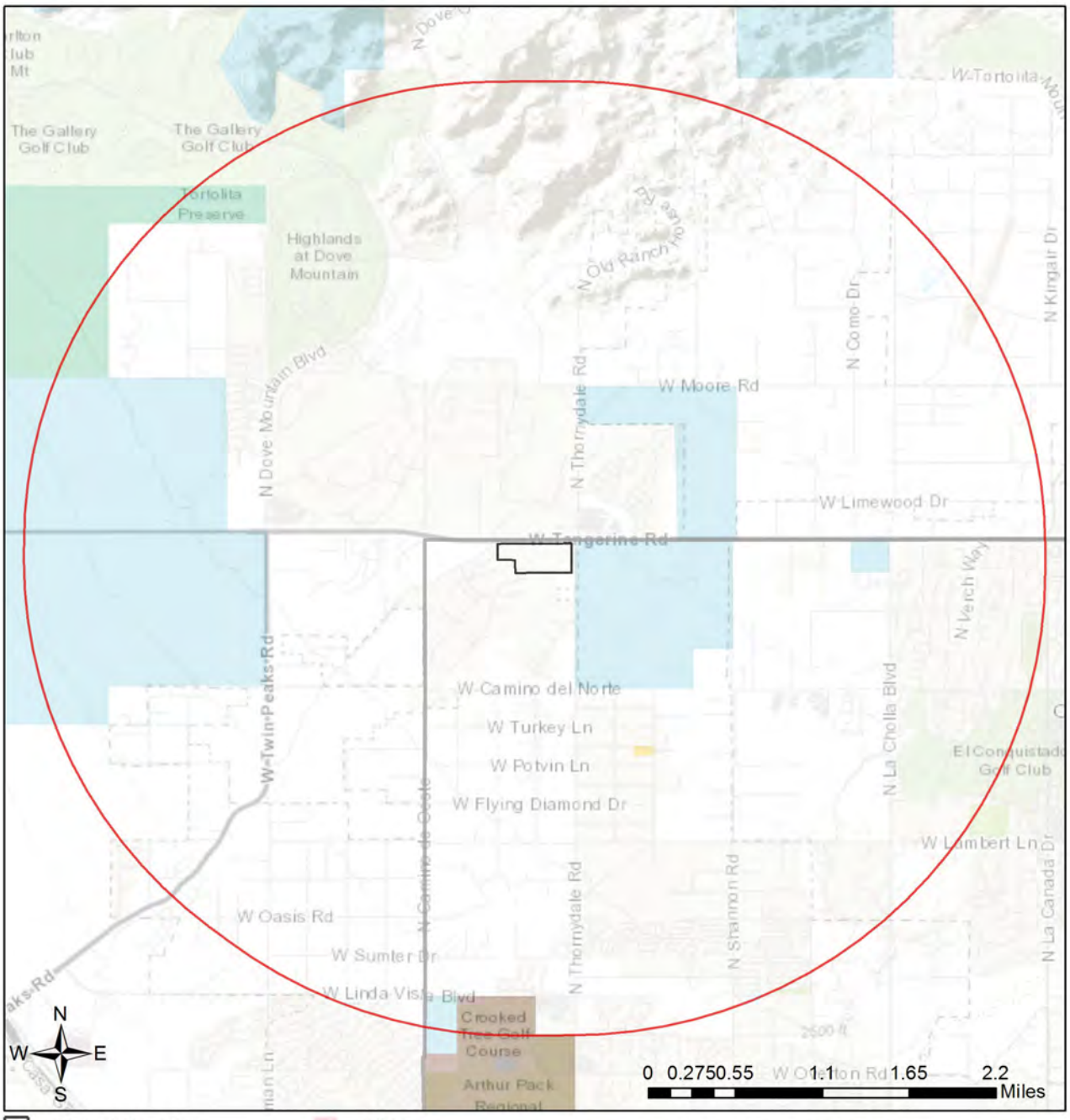
Township/Range(s): T12S, R13E

USGS Quad(s): RUELAS CANYON

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

Thornydale and Tangerine

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): 51.06
Lat/Long (DD): 32.4222 / -111.0510
County(s): Pima
AGFD Region(s): Tucson
Township/Range(s): T12S, R13E
USGS Quad(s): RUELAS CANYON

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

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
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
Leptonycteris yerbabuenae	Lesser Long-nosed Bat	SC				1A
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S		1A
Tumamoca macdougalii	Tumamoc Globeberry	DL	S	S	SR	

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
Aspidoscelis stictogramma	Giant Spotted Whiptail	SC	S			1B
Aspidoscelis xanthonota	Red-backed Whiptail	SC	S			1B
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		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
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

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
Heloderma suspectum	Gila Monster					1A
Incilius alvarius	Sonoran Desert Toad					1B
Lasiurus xanthinus	Western Yellow Bat		S			1B
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
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
Spizella breweri	Brewer's Sparrow					1C
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B
Toxostoma lecontei	LeConte's Thrasher			S		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.

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/.

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

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

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/

HDMS records indicate that **Lesser Long-nosed Bats** have been documented within the vicinity of your project area. Please review the Lesser Long-nosed Bat Management Guidelines at: https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FINALlecuyeHabitatGdln.pdf

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.