MARANA PLANNING COMMISSION
REGULAR COMMISSION MEETING
NOTICE AND AGENDA
11555 W. Civic Center Drive, Marana, Arizona 85653
Council Chambers, March 29, 2017, at or after 6:30 PM

Thomas Schnee, Chairman
Don Duncan, Vice Chair
Terry Fehrmann, Commissioner
Marcia Jakab, Commissioner
Steve Miklosi, Commissioner
Richard Miller, Commissioner
John Officer, 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 March 29, 2017, at or after 6:30 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 6:30 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 in the lobby outside 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 in the lobby outside 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.

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 Minutes

1. Approval of the January 25, 2017 Meeting Minutes

B. Public Hearings

1. **PCZ1606-002: Twin Peaks and Lambert Lane Rezoning;** A request for a recommendation to the Marana Town Council for approval to rezone approximately 34 acres of land from R-144 (single-family residential) to R-6 (single-family residential). The property is generally located east of Twin Peaks Road and north of the Lambert Lane alignment within a portion of Section 11, Township 12 S, Range 12 E. (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)(3), the Planning Commission may ask for discussion or consultation for legal advice with the Town Attorney concerning any matter listed on this agenda.

ADJOURNMENT

Planning Commission

Meeting Date: 03/29/2017

To: Planning Commission

From: Terri Byler, Executive Assistant

Date: March 29, 2017

Subject: **Approval of the January 25, 2017 Meeting Minutes**

Attachments

January 25, 2017 Draft Minutes

PLANNING COMMISSION MEETING
MINUTES
11555 W. Civic Center Drive, Marana, Arizona 85653
Council Chambers, January 25, 2017, at or after 6:30 p.m.

Thomas Schnee, Chairman
Don Duncan, Vice Chair
Terry Fehrmann, Commissioner
Marcia Jakab, Commissioner
Steve Miklosi, Commissioner
Richard Miller, Commissioner
John Officer, Commissioner

REGULAR PLANNING COMMISSION MEETING

CALL TO ORDER. Chairman Schnee called the meeting to order at 6:30 p.m.

PLEDGE OF ALLEGIANCE AND INVOCATION/MOMENT OF SILENCE.
Led by **Chairman Schnee**.

ROLL CALL. Terri Byler, Planning Commission Secretary, called roll. A quorum was present. Commissioner Officer arrived at 6:33 p.m.

CALL TO THE PUBLIC. No speaker cards presented.

APPROVAL OF AGENDA. ***Motion to approve by Commissioner Miklosi, seconded by Commissioner Jakab. Passed unanimously.***

ANNOUNCEMENTS.

GENERAL ORDER OF BUSINESS. Approval of December 21, 2016 meeting minutes.
Motion to approve by Vice Chair Duncan, seconded by Commissioner Miklosi. Passed unanimously.

PUBLIC HEARINGS.

1. PCM1701-001 Amendments to Title 5 of the Land Development Code. Recommendation to the Council to amend the Marana Land Development Code Title 5 (Zoning) to reduce the minimum lot width for the R-16, R-12, R-10, R-8 and R-7 zones by five feet. (Steven Vasquez)

Steven Vasquez - On October 28, 2015 the Planning Commission unanimously recommended approval to the Town Council to reduce the lot width of the R-6 Residential zone by five feet;

DRAFT

to 50 feet. This allowed for flexibility with housing model choices and lot marketability for developers. The amendment to reduce the R-6 Residential zone lot width was approved unanimously by Town Council on November 17, 2015.

Staff is currently in the process of updating the Land Development Code. In the recommendations report submitted by the consultant, in December of 2016, it noted the concern on restrictions on lot sizes by the development community. The report also mentioned the town's need to reduce its reliance on specific plans and to create a greater range of lot sizes. The report emphasized a need for greater flexibility within the zoning districts.

Staff would like to expand that flexibility within the current Land Development Code by recommending reducing the minimum lot width by five feet in the following zones: R-16, R-12, R-10, R-8 and R-7. These are the zones that home builders generally build in and are subject to the residential design standards, along with R-6, found in Title 8 of the Land Development Code. All other development standards found within the zoning districts wil remain unchanged.

Motion to approve by Commissioner Officer, seconded by Commissioner Jakab. Passed unanimously. 7-0

COMMISSION ACTION.

INFORMATIONAL ITEMS/POSSIBLE ACTION ITEMS.

FUTURE AGENDA ITEMS.

ADJOURNMENT. ***Motion to adjourn at 6:44 p.m. by Commissioner Jakab, seconded by Commissioner Officer. Passed unanimously.***

CERTIFICATION

I hereby certify that the foregoing are the true and correct minutes of the Marana Planning Commission meeting held on January 25, 2017. I further certify that a quorum was present.

Terri Byler

Terri Byler, Planning Commission Secretary

DRAFT

Planning Commission

Meeting Date: 03/29/2017

To: Planning Commission

From: Brian Varney, Senior Planner

Date: March 29, 2017

Strategic Plan Focus Area:
Not Applicable

Subject: **PCZ1606-002: Twin Peaks and Lambert Lane Rezoning;** A request for a recommendation to the Marana Town Council for approval to rezone approximately 34 acres of land from R-144 (single-family residential) to R-6 (single-family residential). The property is generally located east of Twin Peaks Road and north of the Lambert Lane alignment within a portion of Section 11, Township 12 S, Range 12 E. (Brian D. Varney)

Discussion:

Rezoning Request
The WLB Group is requesting a recommendation to the Marana Town Council for approval of the Twin Peaks and Lambert Lane rezoning, a proposal to rezone approximately 34 acres of land from R-144 (single-family residential, minimum lot size of 144,000 square feet) to R-6 (single-family residential, minimum lot size of 6,000 square feet). The land use plan proposes a single-family residential development consisting of 59 lots and a significant amount of active and passive open space.

Marana General Plan
The Marana General Plan designates the proposed rezoning area with a land use category of Low-Density Residential (LDR). The LDR land use category is typically characterized by single-family detached homes on relatively large lots within a density range of 0.5 to 2.0 residences per acre where the retention of a semi-rural, open character is desired. Environmental factors may allow for clustered housing projects. The proposed density of 1.7 residences per acre falls within the density range prescribed for the Low-Density Residential land use category.

Land Use
The rezoning area is bordered on the west by Twin Peaks Road, on the north by a small R-36 zoned parcel soon to be developed with the water booster and reservoir facility to serve development in the area, and on the east and south by Pima County SR (Suburban Ranch) zoned property developed as single-family residential. Property has recently been rezoned to the northwest and northeast of the subject rezoning area as Twin Peaks Vista and The Preserve at Twin Peaks, respectively, for single-family residential development.

The land use plan for the Twin Peaks and Lambert Lane rezoning proposes a single-family residential development consisting of 59 lots, roadways, drainage, and utility infrastructure, as well as approximately 10.3 acres of active and passive open space. Future development is proposed to be compatible with surrounding and nearby uses. Smaller lots are concentrated toward the center of the site and along portions of the Twin Peaks Road frontage while larger lots are proposed along the south and east boundaries adjacent to the existing larger lot development in Pima County.
The landscaped bufferyards proposed along these boundaries are substantial at a depth of 40 feet to provide an even greater separation from existing development. The gross density proposed for the site is 1.7 residences per acre. Recreation will consist of a half-acre recreation area as well as a trail system including both private and public trails. A public trail easement will be dedicated to the Town at the time of platting, and the Town will have the opportunity to develop a natural earth pedestrian trail along the south

and east boundaries of the site.

The topography of the site is characterized by relatively flat terrain sloping from the northeast to the southwest. The significant natural drainageways will be largely preserved in their natural state and designated as common area with minor encroachments for roadway, utility, and trail crossings. Additional stormwater runoff created by the development will be detained within on-site basins, thereby, mitigating impact to upstream and downstream drainage patterns. Town staff will evaluate all on-site and off-site drainage in greater detail during the preliminary plat process and will require the submittal of a drainage study.

The land use plan proposes three lot categories with minimum lot sizes of 6,000 square feet, 21,780 square feet (one-half acre), and 43,560 square feet (1 acre). A mixture of one-story and two-story homes are proposed; however, the majority of lots located along the perimeter of the rezoning area adjacent to existing residential development are proposed to be developed with single-story homes. In addition to the Town's standard development regulations, development within the rezoning area will be subject to the regulations of the Twin Peaks Corridor Study as well as the Town's Residential Design Standards.

Access and Circulation
Primary access to the proposed development will be provided off of Twin Peaks Road, and an emergency access will be provided in the southeast part of the site via Lambert Lane. Although it is undetermined at this time whether internal streets will be public or private, streets will be constructed to Town standards. At the time of subdivision platting, or earlier if determined necessary by the Town, the property owner will dedicate an additional 45 feet of right-of-way for the potential future extension of Lambert Lane to Twin Peaks Road. The dedication will yield a total half-width of 75', as specified in the Town's Major Routes and Rights of Way Plan. Although the Town does not have imminent plans to extend this roadway, the dedication of right-of-way will provide the necessary property rights in the event it becomes warranted by future traffic studies. Additionally, 30 feet of right-of-way will be dedicated along the east property boundary for Blue Bonnet Road.

Utilities
The rezoning area is located within the Town of Marana water service area and water supply is assured; however, water is currently not provided to the site. A 16-inch water main is located within Twin Peaks Road near its intersection with Blue Bonnet Road; however, this property will be dependent upon the imminent construction of the new water booster facility north of the site to meet water pressure requirements. A water service agreement with the Town of Marana as well as plans for the water distribution system to serve this project will be required prior to development. Sewer service will be provided to future development within the rezoning area by Pima County. The planned developments within this area of the Twin Peaks corridor will collaborate on the construction of a sewer line extending south along the Blue Bonnet Road alignment approximately 1.25 miles to the intersection of Linda Vista Blvd. and Hartman Lane. The rezoning area lies within the service areas of TRICO, Southwest Gas, Century Link and Comcast.

Citizen Participation
The applicant held a neighborhood meeting on July 28, 2016 to introduce the proposed rezoning to the nearby property owners. Some of the concerns expressed at the meeting included: proposed building heights on the 1-acre perimeter lots and seemingly insufficient buffer yards. The applicant agreed to limit building height to one-story on the larger perimeter lots and increased the bufferyard depth to 40 feet along the east and south property boundaries. A number of nearby property owners complimented the applicant for proposing a variety of lot sizes within the plan. The applicant has engaged in continuing conversations with some neighboring property owners and has worked through their concerns.

Public Notification
The public hearing was legally noticed in The Daily Territorial newspaper, and all property owners within

300 feet 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.

Recommended Findings of Fact

1. The property is currently zoned R-144 (single-family residential, minimum lot size of 144,000 square feet). The proposed change in zoning from R-144 to R-6 (single-family residential, minimum lot size of 6,000 square feet) will not require an amendment to the General Plan, as the existing land use category of Low-Density Residential (LDR) prescribes a density range of 0.5 - 2.0 residences per acre. The Twin Peaks and Lambert Lane rezoning proposes a density of 1.7 residences per acre.

2. With the acceptance of the recommended conditions, the proposed rezoning is in compliance with all other development standards of the Land Development Code related to this zoning classification.

3. The proposed rezoning, with acceptance of the recommended conditions, does not appear to be detrimental to the immediate area or to the health, safety, and welfare of the inhabitants of the area and the Town of Marana.

Case Analysis Review Criteria

1. Ability to comply with development regulations, i.e. water, sanitation, access, developable parcel, etc.:

With the acceptance of the recommended conditions the proposed rezoning complies with the requirements of all agencies.

2. Ability to comply with requirements of the zoning regulations, i.e. lot size, frontage, setbacks, etc.:

With the acceptance of the recommended conditions the proposed rezoning complies with the requirements of R-6 (single-family residential) zoning and the purpose and intent of the Land Development Code.

3. Consistent with the purpose of the zoning regulations and with the intent of the General Plan:

The proposed rezoning is consistent with the purpose and intent of the Land Development Code and the Town of Marana General Plan Low-Density Residential (LDR) land use category.

4. Compatible with the surrounding area, harmonious with the character of the neighborhood, not detrimental to the immediate area, and not detrimental to the health, safety, or welfare of the inhabitants of the area and the Town:

Based upon the requirements and conditions, the proposed rezoning does not appear to be detrimental to the immediate area or to the general health, safety, and welfare of the inhabitants of the area and the Town of Marana.

Staff Recommendation:

Staff recommends that the Planning Commission recommend to the Marana Town Council approval of PCZ1606-002 Twin Peaks and Lambert Lane 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 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 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 the Marana Utilities Department (the “water provider”) prior to approval of a preliminary plat 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 Mountain Vista Fire District prior to Town Council consideration of a final plat for any portion of the Rezoning Area.
8. The maximum number of residential lots within the Rezoning Area shall not exceed 59.
9. 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.
10. The Property Owners shall transfer to Marana, by the appropriate Arizona Department of Water Resources form, those water rights being IGR, Type I or Type II for the Town 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 Town 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.
11. 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.
12. A 100% clearance survey for the desert tortoise shall be completed by a qualified biologist at the Property Owner's expense and a survey report shall be submitted to the Town and to the Arizona Game and Fish Department (AZGFD) prior to issuance of any grading permits. If a desert tortoise is found during the survey or at any time during construction, the Property Owners shall immediately notify the Town and the AZGFD, and the tortoise shall be moved in accordance with the most current AZGFD Tortoise Handling Guidelines at the Property Owners' expense.
13. The Property Owners shall not cause any lot split of any kind without the written consent of the Town of Marana.

14. The following lots shall be limited to one-story construction: 6-15 and 43-59.
15. At the time a final subdivision plat is submitted for the Rezoning Area, the Property Owners shall dedicate additional right-of-way to provide a total half-width of 75 feet for Lambert Lane along the entire south boundary of the Rezoning Area. Where 30 feet of right-of-way width currently exists, an additional width of 45 feet will be dedicated. Where no right-of-way currently exists, the entire 75 feet will be dedicated.
16. At the time a final subdivision plat is submitted for the Rezoning Area, the Property Owners shall dedicate a 30-foot width of right-of-way along the entire east boundary of the Rezoning Area for Blue Bonnet Road.
17. The Property Owners shall dedicate a public sewer easement through the rezoning area extending from the Twin Peaks Road right-of-way to the 40-foot sewer easement along the east property boundary enabling sewer facilities to be provided to future development west of Twin Peaks Road.
18. During construction of the subdivision, the Property Owners shall grade the Lambert Lane access drive from the west boundary of parcel 216-32-021C east to the Blue Bonnet Road alignment.
19. The Property Owners shall dedicate on the final subdivision plat a 30-foot wide perpetual easement extending the entire length of the south property boundary of the Rezoning Area to the Metropolitan Domestic Water Improvement District (Metro Water) facilitating the improvement of its water facilities and water distribution in the area as part of the Metro Water District Northwest Recharge and recovery Project. Metro Water shall coordinate its construction activities with the Property Owners to ensure that unreasonable conflicts or costs are not imposed upon or incurred by the Property Owners during the development of the property as a result of Metro Water's construction activities. This may include the postponement of Metro Water's construction activities until the Property Owners have completed the installation of sewer infrastructure and other utilities. Any landscaping material or other improvements removed or disturbed by Metro Water during the installation of its infrastructure shall be replaced, and the disturbed area shall be restored to its pre-disturbance condition.

Suggested Motion:

I move to recommend to the Marana Town Council approval of PCZ1606-002 Twin Peaks and Lambert Lane rezoning subject to the recommended conditions.

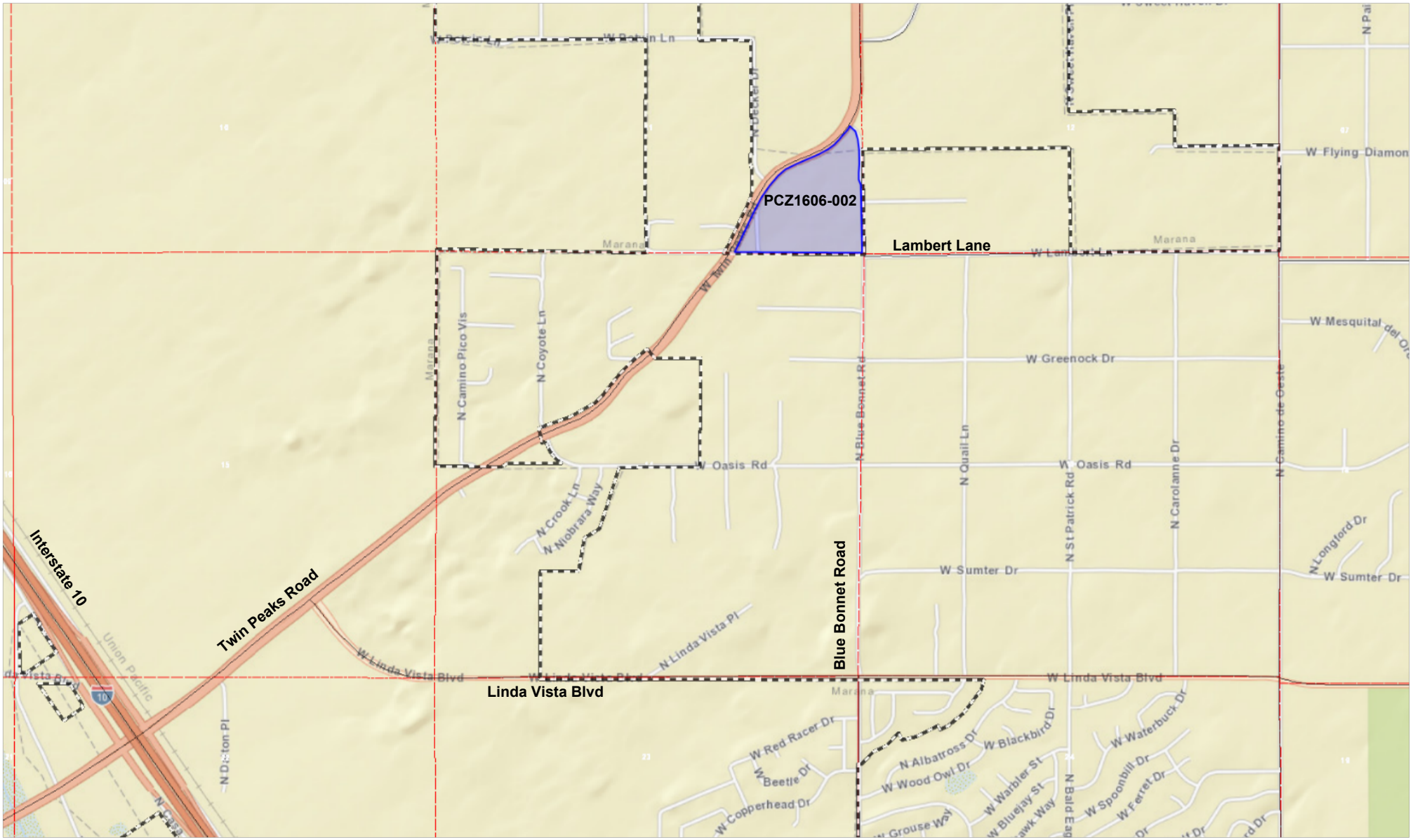
Attachments

Location Map

Rezoning application

Twin Peaks and Lambert Lane Rezoning Site Aalysis

Tierra ROW letter_Metro Water easement



N
W E
S

PCZ1606-002: Twin Peaks and Lambert Lane Rezoning

400m
1000ft
111° 05' 55.382" 32° 24' 09.430" Scale 1:14,526

This map was generated from the Town of Marana's GIS Web mapping system and is to be used for reference use only. GIS data is constantly changing so layers that appear on this map may or may not be accurate or current depending on the date and time this map was created.

MARANA

3/7/2017

MARANA
PLANNING

TOWN OF MARANA SUBMITTAL APPLICATION

Type of Application (Check One)

- ☐ Annexation
- ☒ Rezone
- ☐ Specific Plan
- ☐ Variance
- ☐ Improvement Plan (Specify Type): _____
- ☐ Preliminary Plat
- ☐ Final Plat
- ☐ Development Plan
- ☐ Minor Land Division
- ☐ General Plan Amendment
- ☐ Landscape Plan
- ☐ Native Plant Permit
- ☐ Native Plant Exception
- ☐ Conditional Use Permit
- ☐ Significant Land Use Change
- ☐ Storm Water (SWPP)
- ☐ Other: _____

General Data Required

Project Name: Twin Peaks 34 Parcel #(s): 216-23-073D; 216-23-072B

Description of Project: Proposed Rezoning from R-144 to R-6 Gross Area (Acres): 33.4

Project Address/Location: 5600 W. Camino de Manana

Property Owner: Chun-Ying Frank Lin Contact Person: Greg Wexler

Street Address: 6088 W. Arizona Pavilions Drive Suite 1 Email: gregwexler@hotmail.com

City: Marana State: AZ Zip Code: 85743

Phone #: _____ Fax #: _____ Cell #: _____

Applicant: Meritage Homes Contact Person: Jimmy Gaulin

Street Address: 3275 W. Ina Road, Suite 200 Email: James.Gaulin@meritagehomes.com

City: Tucson State: AZ Zip Code: 85741

Phone #: 225-6853 Fax #: _____ Cell #: 419-2472

Agent/Representative: The WLB Group, Inc. Contact Person: Paul Oland

Street Address: 4444 E. Broadway Email: gpoland@wlbgroup.com

City: Tucson State: AZ Zip Code: 85711

Phone #: (520) 881-7480 Fax #: _____ Cell #: _____

Authorization of Property Owner

I, the undersigned, certify that all of the facts 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).**

Paul Oland as Agent — for Paul Oland — 6/3/16

Print Name of Owner/Applicant — Signature — Date

Internal Use Only:

Project No. PC2160602 Date Received 6/3/16 Signature _____

Twin Peaks & Lambert Lane

Rezoning Site Analysis

PCZ1606-002

02.24.2016









The WLB Group

WLB

Engineering · Landscape Architecture
Planning · Surveying · Urban Design



PREPARED FOR:

Meritage Homes of Arizona
Attn: Lisa Hoskin
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Tucson, AZ 85741

PREPARED BY:

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WLB No. 114013-C-001

March 2017

CONTENTS

I. Introduction 1

A. Project Overview 1

B. Primary Objectives 1

C. Landscape Concept 2

II. Inventory & Analysis 3

A. Existing Land Uses 3

1. Site Location 3

2. Existing On-site Zoning and Land Uses 3

3. Existing Adjacent Zoning and Land Uses 3

4. Location and ownership of wells/well sites within 100 feet of site 4

Exhibit A: Site Location Map *5*

Exhibit B: Aerial Photograph *6*

Exhibit C: Existing General Plan Land Uses *7*

Exhibit D: Existing Zoning *8*

Exhibit E: Existing Land Uses *9*

Exhibit F: Existing Nearby Developments *10*

B. Topography and Slope 11

1. Topographic Characteristics 11

2. Pre-Development Slope 11

Exhibit G: Topography *12*

C. Hydrology 13

1. Off-site Features Affecting Site 13

2. Acreage of Upstream Offsite Watersheds 13

3. On-site Hydrology Characteristics 13

4. Existing Drainage Conditions along the Downstream Property Boundary 13

Exhibit H: On-Site Hydrology / FEMA Floodplain *14*

D. Vegetation 15

1. On-site Vegetative Communities 15

2. Significant, Threatened, or Endangered Flora 15

3. Vegetative Densities 15

Exhibit I: Significant Vegetation *16*

E. Wildlife 17
1. Arizona Game and Fish Department Input 17
Exhibit J: AZGFD Report *18*
F. Soils and Geology 29
1. Soils 29
2. Geology 29
G. Viewsheds 29
1. Viewsheds from Adjacent Properties 29
2. Site Visibility 29
Exhibit K: Soils Map *30*
Exhibit L: Viewsheds *31*
H. Traffic 44
1. Existing / Proposed Off-site Streets between the Development and Nearest Arterial Streets 44
2. Nearby Arterial Streets 44
3. Nearby Arterial Intersections 44
4. Nearby Bicycle / Pedestrian Ways 44
I. Recreation and Trails 44
1. Trails, parks and recreation areas within one mile of site. 44
Exhibit M: Trails *45*
J. Cultural, Archaeological, and Historic Resources 46
1. On-site Resources 46
2. Archaeologist Letter 46
Exhibit N: Archaeological Survey Summary *47*
K. Existing Infrastructure and Public Facilities 49
1. Sewer 49
2. Water 49
3. Natural Gas 49
4. Electric 49
5. Fire Service 49
6. Police Service 49
Exhibit O: Existing Utility Infrastructure *50*
Exhibit P: Sewer Capacity Letter *51*
Exhibit Q: Site Resource Inventory *52*
Exhibit R: McHarg Composite Map *53*

III. Land Use Plan 54
A. Purpose and Intent 54
B. Relationship to Town of Marana Adopted Plans 54
C. Compatibility to Adjoining Development 54
D. Land Use Proposal 54
Exhibit S: Land Use Concept (TDP) *55*
E. Grading Concept 56
F. Post-Development Hydrology 56
G. Vegetation and Landscaping 56
Exhibit T: Conceptual Landscape Plan *57*
H. Wildlife 58
I. Viewsheds 58
J. Circulation Concept 58
K. Public Utilities 58
1. Water 58
2. Sewer 58
3. Electric 59
4. Natural Gas 59
5. Telecommunications 59
L. Public Service Impacts 59
1. Police 59
2. Fire 59
3. Schools 59
Exhibit U: MUSD Letter *60*
M. Recreation and Trails 61
N. Cultural, Archaeological, and Historic Resources 61
Exhibit V: Circulation Concept Plan *62*
IV. Bibliography 64
V. Appendix A – Traffic Impact Statement 66
VI. Appendix B – Site Resource Inventory 67

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I. Introduction

A. Project Overview

The project is a proposed residential development consisting of 34± acres located at Twin Peaks Road and Lambert Lane. This project contains a range of single-family detached home lot sizes to respond to market demand for housing in the northwest Tucson metropolitan area. The Marana General Plan has a vision for up to 2.0 residences per acre along the Twin Peaks corridor, including the subject property. This project will adhere to the general plan designated density by building 59 lots on 34± acres for a 1.7 residences per acre ratio. In addition to the open space the project will also include a centrally located recreation area. This recreation area will add to the project and contribute to the quality of life for residents. The development is a balanced design both for people and for native Sonoran Desert biological resources. By leaving corridors of open space within the site, the native animal populations will be able to traverse the neighborhood and continue their foraging and migration patterns.

The entire Twin Peaks Road corridor is planned to be developed, although much of it is heavily constrained by environmental and hydrological constraints. This site is relatively unconstrained, making it an appropriate place for corridor development to occur. Still, it strikes an important balance between preserving wash corridors, providing transitional density to existing development, and locating appropriate density along major roadway infrastructure.

B. Primary Objectives

- Provide much needed high-quality, environmentally-sensitive, single-family detached homes for new residents wishing to live in the Town of Marana.
- Clustering homes such that the natural desert beauty can be appreciated by future residents within the development, as well as the surrounding residents.
- Provide functional wildlife corridors and preserve sensitive habitat.
- Fulfill the Town of Marana's vision for sustainable growth along Twin Peaks Road (a major regional arterial roadway).
- Construct a residential community that is compatible with both existing and future surrounding land uses.
- Fulfill elements of the Town of Marana Strategic Plan by creating meaningful open space, trail connectivity, and active recreation areas.

This document has been prepared in support of a request to rezone the subject property from R-144 (residential) to R-6 (residential). The subject properties currently consist of two parcels bounded by Twin Peaks Road, Blue Bonnet Road, and Lambert Lane. The General Plan designates these properties as Low Density Residential (LDR), and the existing zoning is R-144. As the market continues to improve, large homebuilders have resurfaced as motivated buyers of platted lots. In the northwest Tucson metropolitan area market, those homebuilders have expressed the strongest demand for production home sites set in the context of significant onsite open space. This rezone is intended to allow the property to be developed in response to this strong demand, while at the same time preserving environmentally-sensitive portions of the site.

If built to current zoning standards, 144,000 square-foot lots and their unrestricted grading areas would blanket the property and significantly impact native wildlife habitat. One of the primary reasons to modify the current zoning is so that the most sensitive portions of the property can be effectively preserved as open space with enforceable restrictions. The proposed development, the region, and the natural functionality and beauty of the Sonoran Desert will benefit indefinitely by clustering housing away from sensitive habitat areas.

Additionally, the development is compatible with the existing adjacent land uses. Although a number of the surrounding properties are vacant, the project has been carefully designed to be sensitive to nearby existing residences by proposing buffers along the project's eastern perimeter, and large one-acre lots along the southern border. This is a more sensitive approach to minimizing impacts to existing residents because it provides density transition onsite.

C. Landscape Concept

Title 17 of the Marana Land Development Code, Environmental Resource Preservation, Native Plant and Landscape Requirements, allows for this type of subdivision development. The project meets the intent of those assembled regulations and directions. In addition, the development will reuse as many native plants as practical for the subdivision's landscaping needs. Native plants are drought tolerant and uniquely suited for the local climate, and further meet the primary objective of developing a sustainable and environmentally-sensitive residential community. As part of the platting process, a native plant inventory will be prepared for the entire site, identifying vegetation to be preserved in place or transplanted within the development site.

II. Inventory & Analysis

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

A. Existing Land Uses

1. Site Location

   The subject properties are located within Township 12 South, Range 12 East, Section 11, Town of Marana, Pima County, Arizona. The subject properties total approximately 34 acres, and are located on W. Twin Peaks Road between N. Blue Bonnet Road and the W. Lambert Lane alignment. (See Exhibit A: Site Location Map.)

   Pima County tax assessor designates the subject properties as parcels 216-23-073D and 216-23-072B.

   Per Marana Addressing the administrative address for this project is 5565 W. Twin Peaks Rd.

2. Existing On-site Zoning and Land Uses

   The subject properties are currently undeveloped and vacant.

   The subject properties are currently zoned R-144 (Single-Family Residential District) with a minimum lot size of 144,000 square feet.

   The Town of Marana General Plan designates the subject properties as Low Density Residential (LDR: 0.5 – 2.0 dwelling units per acre). As stated in the Marana 2010 General Plan, large areas of significant natural resources have been identified in the Tortolita Fan in northeast Marana that have a range of development constraints. These factors should promote clustered housing projects. This project follows its recommendations to build relatively low-density residential cluster development that minimizes disturbance to the on-site riparian areas. (See Exhibit C: Existing General Plan Land Uses.)

3. Existing Adjacent Zoning and Land Uses

   a. Surrounding Zoning & Land Uses

   The subject properties are surrounded by the following existing zonings, existing land uses, and General Plan land use designations within a quarter of a mile of the subject property: (See Exhibit C: General Plan Land Use Designations, Exhibit D: Existing Zoning, and Exhibit E Existing Land Uses.)

N:	Existing zoning:	F, Twin Peaks Vista Specific Plan R-36, Single Family Residential
	Existing land use:	Vacant land and single-family residential development
NE:	Existing zoning:	F, The Preserve at Twin Peaks Specific Plan
	Existing land use:	Vacant land

E:	Existing zoning:	SR, Suburban Ranch (Pima Co.)
	Existing land use:	Vacant land and single-family residential development
SE:	Existing zoning:	SR, Suburban Ranch (Pima Co.)
	Existing land use:	Vacant land and single-family residential development
S:	Existing zoning:	SR, Suburban Ranch (Pima Co.)
	Existing land use:	Vacant land and single-family residential development
SW:	Existing zoning:	SR, Suburban Ranch (Pima Co.) GR-1, Rural Residential (Pima Co.)
	Existing land use:	Vacant land
W:	Existing zoning:	GR-1, Rural Residential (Pima Co.)
	Existing land use:	Vacant land and single-family residential development
NW:	Existing zoning:	GR-1, Rural Residential (Pima Co.)
	Existing land use:	Vacant land and single-family residential development

b. Surrounding Building Heights

All nearby structures are single or two story.

c. Surrounding Rezonings

Twin Peaks Oasis Specific Plan, Cascada Specific Plan, Twin Peaks Vista Specific Plan, The Preserve at Twin Peaks Specific Plan.

d. Surrounding Subdivisions and Development Plans

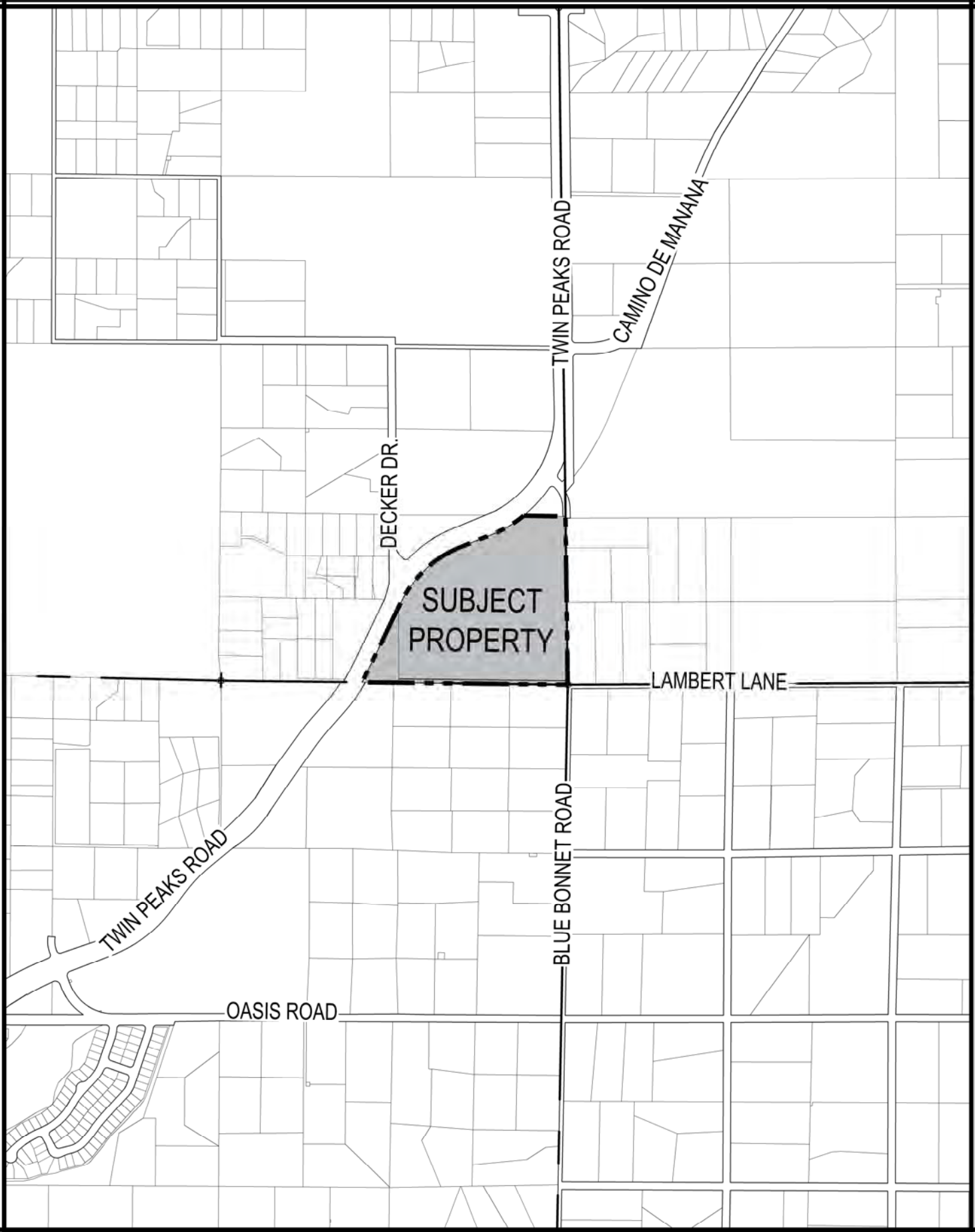
Oasis Hills and Casas de Migel subdivisions are within a mile of the property.

e. Surrounding Architectural Styles

Surrounding architectural styles are typical of most unplanned development in Pima County, which is a mix of contemporary southwestern homes and manufactured housing.

4. Location and ownership of wells/well sites within 100 feet of site

According to ADWR, one well exists on-site: 55-635716. One well exists within 100 feet of the project boundary: 55-591405 and numerous private wells exist further away in the surrounding areas of unplanned development.



The WLB Group WLB

Exhibit A
Location Map

WLB No. 114013-C-011

0' 1000'

Q:\114013\C001 - Twin Peaks 34\01 Planning\04 Rezone or GPA\Site Analysis\Exhibits\Locatin Map.dwg Plotted: Aug. 05, 2016



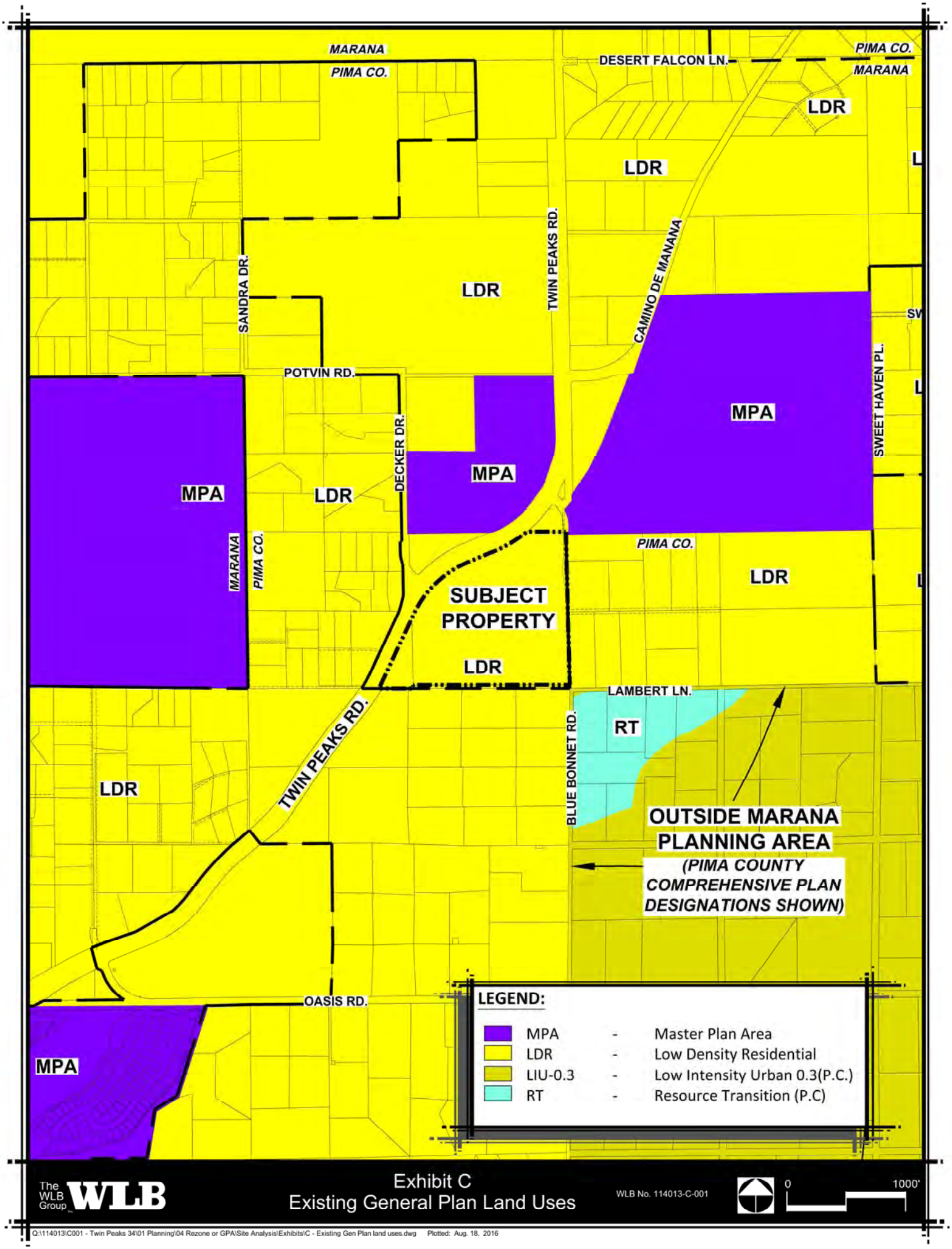
The WLB Group WLB

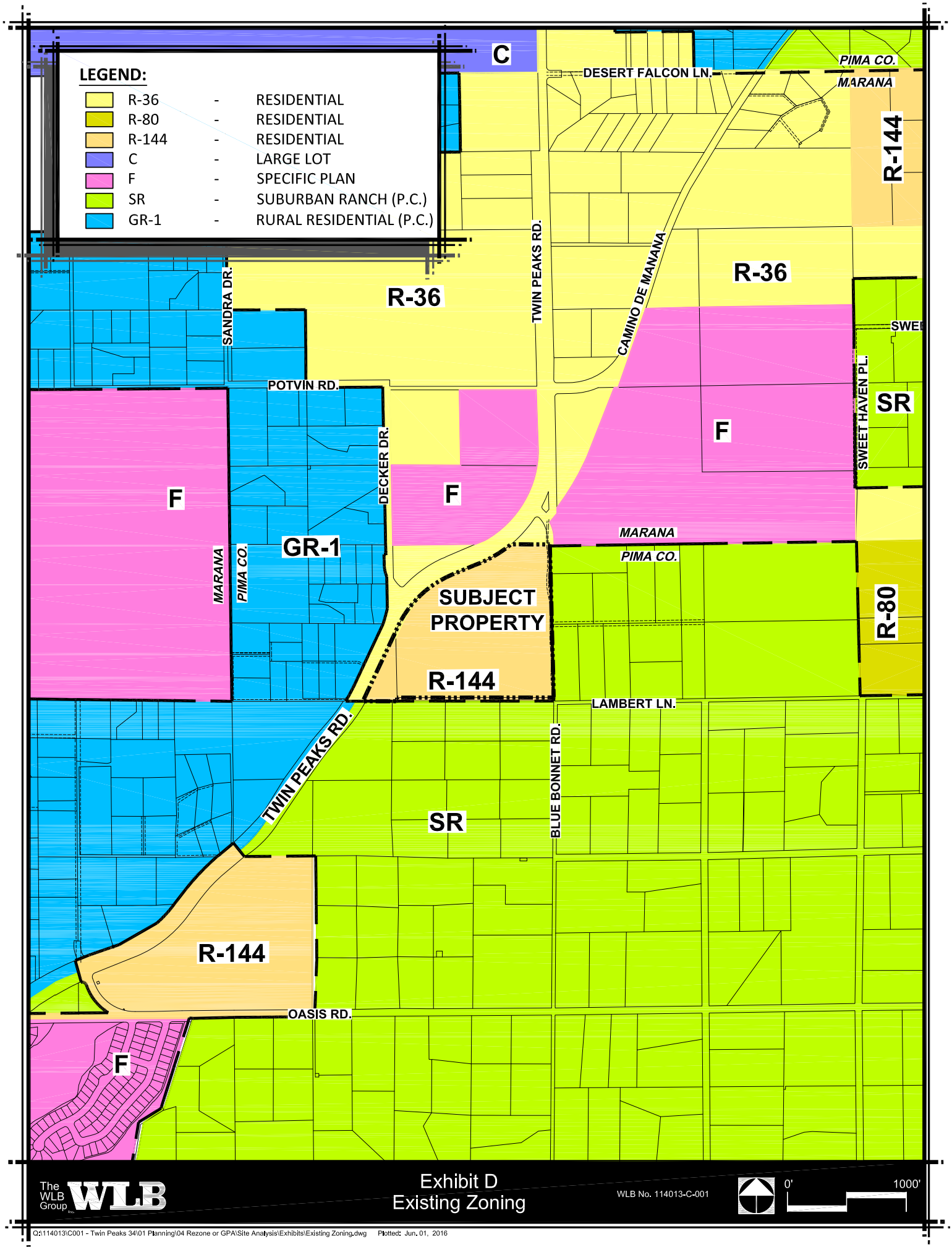
Exhibit B
Aerial Photo of Vicinity

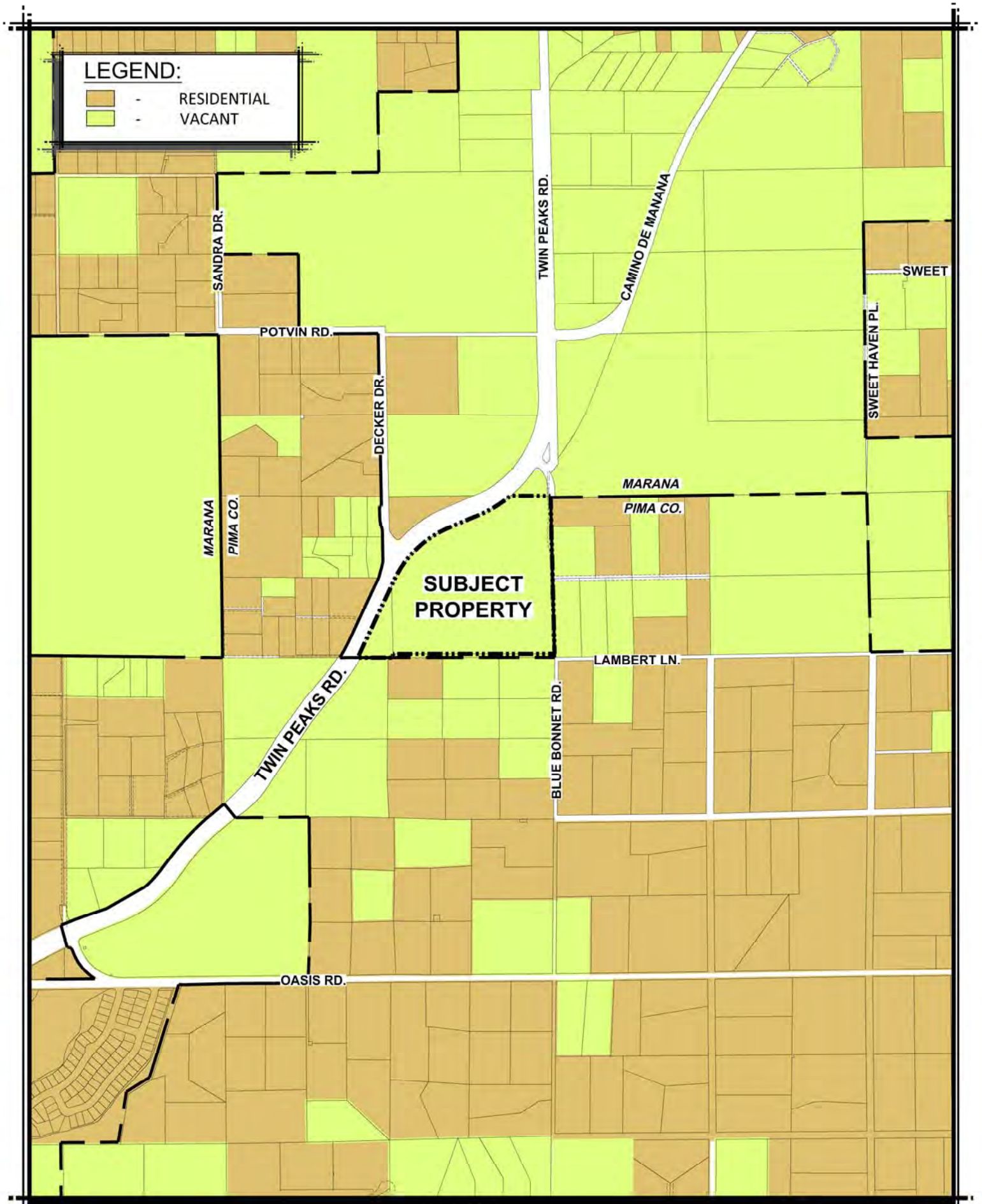
Aerial Photo Date = 2014
WLB No. 114013-C-001

0' 1000'

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MARANA
PIMA CO.
DESERT FALCON LN.
PIMA CO.
MARANA
LDR
LDR
LDR
SANDRA DR.
TWIN PEAKS RD.
CAMINO DE MANANA
SWEET HAVEN PL.
POTVIN RD.
DECKER DR.
MPA
MPA
MPA
LDR
MARANA
PIMA CO.
PIMA CO.
LDR
SUBJECT PROPERTY
LDR
LAMBERT LN.
RT
BLUE BONNET RD.
TWIN PEAKS RD.
LDR
OUTSIDE MARANA PLANNING AREA
(PIMA COUNTY COMPREHENSIVE PLAN DESIGNATIONS SHOWN)
OASIS RD.
MPA
LEGEND:
MPA - Master Plan Area
LDR - Low Density Residential
LIU-0.3 - Low Intensity Urban 0.3(P.C.)
RT - Resource Transition (P.C)
The WLB Group WLB
Exhibit C
Existing General Plan Land Uses
WLB No. 114013-C-001
0
1000'
Q:\114013\C001 - Twin Peaks 34\01 Planning\04 Rezone or GPA\Site Analysis\Exhibits\C - Existing Gen Plan land uses.dwg Plotted: Aug. 18, 2016


LEGEND:
R-36 - RESIDENTIAL
R-80 - RESIDENTIAL
R-144 - RESIDENTIAL
C - LARGE LOT
F - SPECIFIC PLAN
SR - SUBURBAN RANCH (P.C.)
GR-1 - RURAL RESIDENTIAL (P.C.)
C
DESERT FALCON LN.
PIMA CO.
MARANA
R-144
TWIN PEAKS RD.
CAMINO DE MANANA
R-36
SANDRA DR.
R-36
SWEE
POTVIN RD.
SWEET HAVEN PL.
SR
F
DECKER DR.
F
F
MARANA
PIMA CO.
GR-1
MARANA
PIMA CO.
SUBJECT PROPERTY
R-80
R-144
LAMBERT LN.
TWIN PEAKS RD.
BLUE BONNET RD.
SR
R-144
OASIS RD.
F
The WLB Group
WLB
Exhibit D
Existing Zoning
WLB No. 114013-C-001
0'
1000'
Q:\114013\C001 - Twin Peaks 34\01 Planning\04 Rezone or GPA\Site Analysis\Exhibits\Existing Zoning.dwg Plotted: Jun. 01, 2016



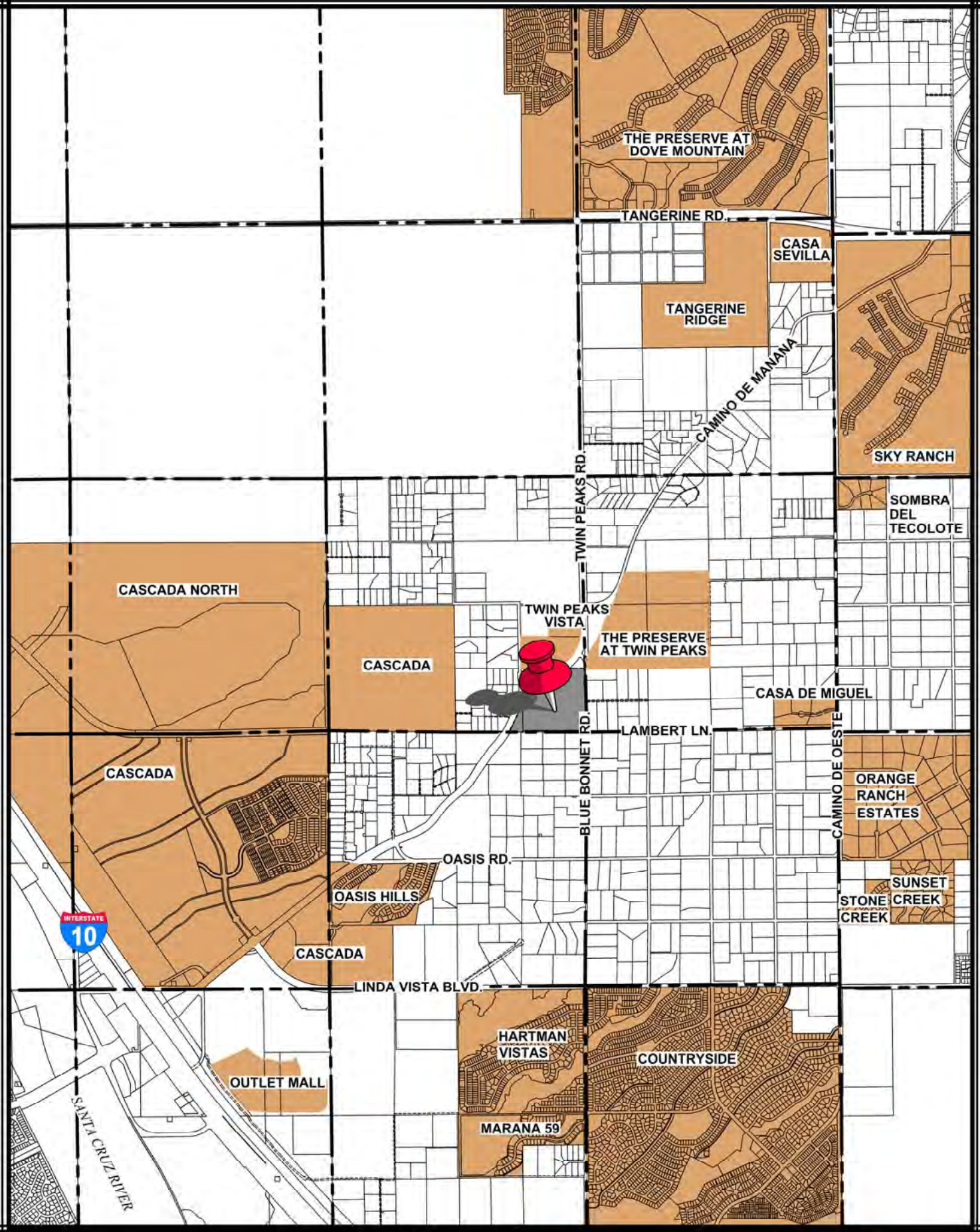
The WLB Group WLB

Exhibit E
Existing Land Uses

WLB No. 114013-C-001

0' 1000'

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The WLB Group WLB

Exhibit F
Existing Nearby Developments

WLB No. 114013-C-001

0 Miles 0.5

Q:\114013\C001 - Twin Peaks 34\01 Planning\04 Rezone or GPA\Site Analysis\Exhibits\X Nearby Developments.dwg Plotted: Jul. 20, 2016

B. Topography and Slope

1. Topographic Characteristics

The topography of the subject properties is characterized by relatively flat terrain. The subject properties generally slope evenly from northeast to southwest. Elevations range from approximately 2,380 feet above sea level at the northeast corner to 2,330 feet above sea level at the southwest corner of the subject properties. The site does not contain any hillside conservation areas, rock outcrops, slopes of 15% or greater, or other significant topographic features.

2. Pre-Development Slope

a. Average Cross-Slope

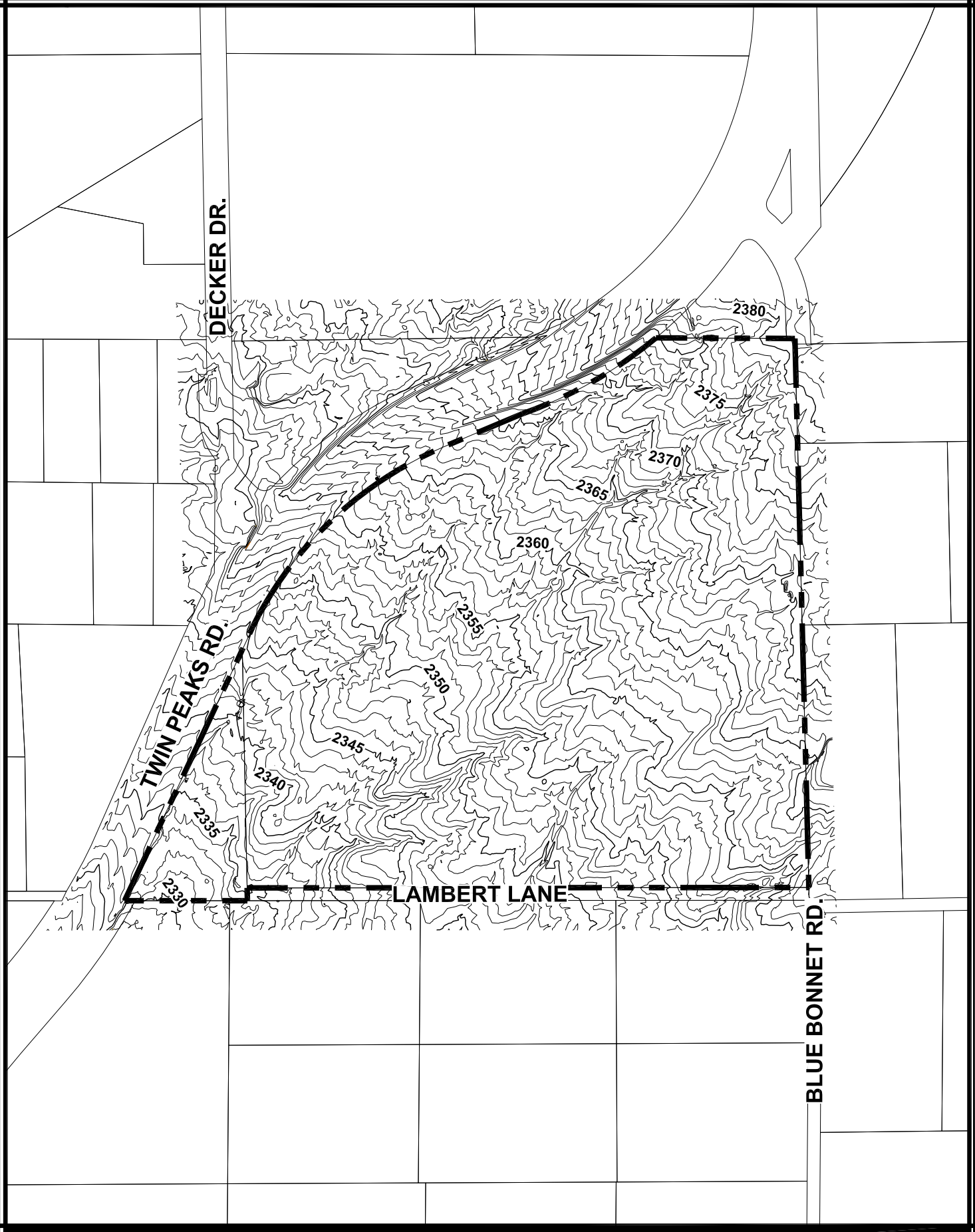
The pre-development average cross-slope for the subject properties is approximately 5.7 percent, according to the following formula:

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

(C x L x 0.0023) / A = Average Cross Slope (1’ x 82,410' x 0.0023) / 33.4 = 5.7%

b. Average Overall Slope

The pre-development properties’ average overall slope is 2.6% from the northeast corner to the southwest corner of the project boundary.



The WLB Group WLB

Exhibit G
Topography

Contour Interval = 1ft.
WLB No. 114013-C-001

0' 300'

Q:\114013\C001 - Twin Peaks 34\01 Planning\04 Rezone or GPA\Site Analysis\Exhibits\Topo.dwg Plotted: Jun. 03, 2016

C. Hydrology

1. Off-site Features Affecting Site

   Upstream of the site, the low density or underdeveloped nature of existing development allows most drainage to flow naturally. Drainage in the area is typically concentrated within the numerous braided washes crisscrossing the Tortolita Fan. Drainage flows over the subject property and through two (2) existing drainage structures along Twin Peaks Road. Drainage then continues downstream of the subject properties in the same manner that is exhibited in the upstream watershed.

2. Acreage of Upstream Offsite Watersheds

   The off-site watershed affecting this property is approximately 150 acres with an overall downward slope of approximately 1.5% from the top of the watershed to the subject property.

3. On-site Hydrology Characteristics

   a. 100-Year Floodplains with Discharges ≥ 50 CFS

   Estimated 100-year floodplains are shown on Exhibit H: On-Site Hydrology/FEMA Floodplain.

   b. Areas of sheet flooding and average depths

   There are no areas of sheet flooding onsite.

   c. Federally mapped floodways and floodplains

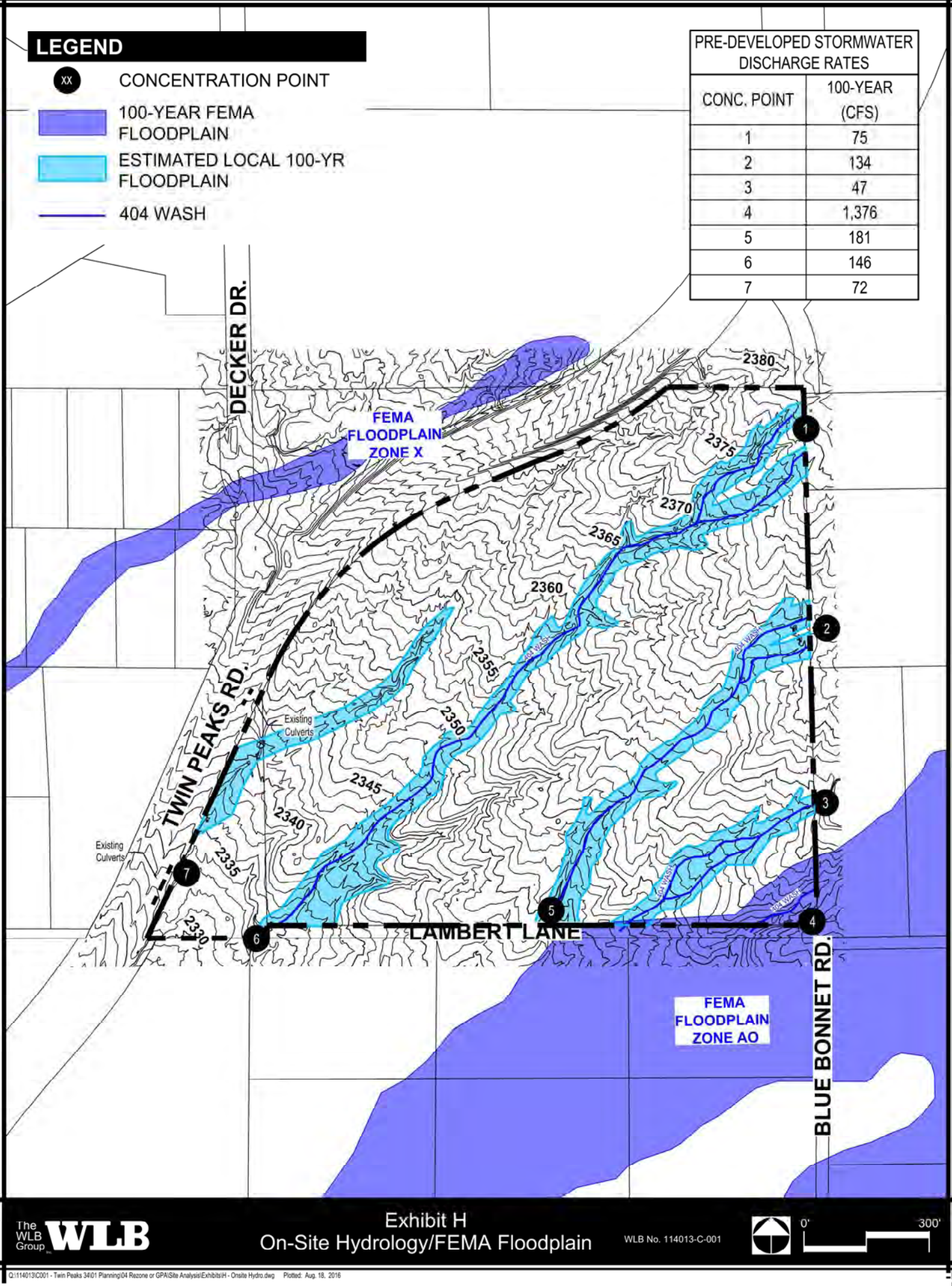
   Federally mapped floodplains exist on-site, but are avoided
   (See FEMA FIRM Map Panel 1065 of 4750, Map Number 04019C1065L and Exhibit H: On-Site Hydrology\FEMA Floodplain).

   d. 100-Year Floodplains with Peak Discharges > 50 CFS

   Estimated 100-year floodplains with discharges are shown on the following exhibit (Exhibit H: On-Site Hydrology\FEMA Floodplain).

4. Existing Drainage Conditions along the Downstream Property Boundary

   See Part 1, above.



The WLB Group WLB

Exhibit H
On-Site Hydrology/FEMA Floodplain

WLB No. 114013-C-001

Q:\114013\C001 - Twin Peaks 3401 Planning\04 Rezone or GPA\Site Analysis\Exhibits\H - Onsite Hydro.dwg Plotted: Aug. 18, 2016

D. Vegetation

1. On-site Vegetative Communities

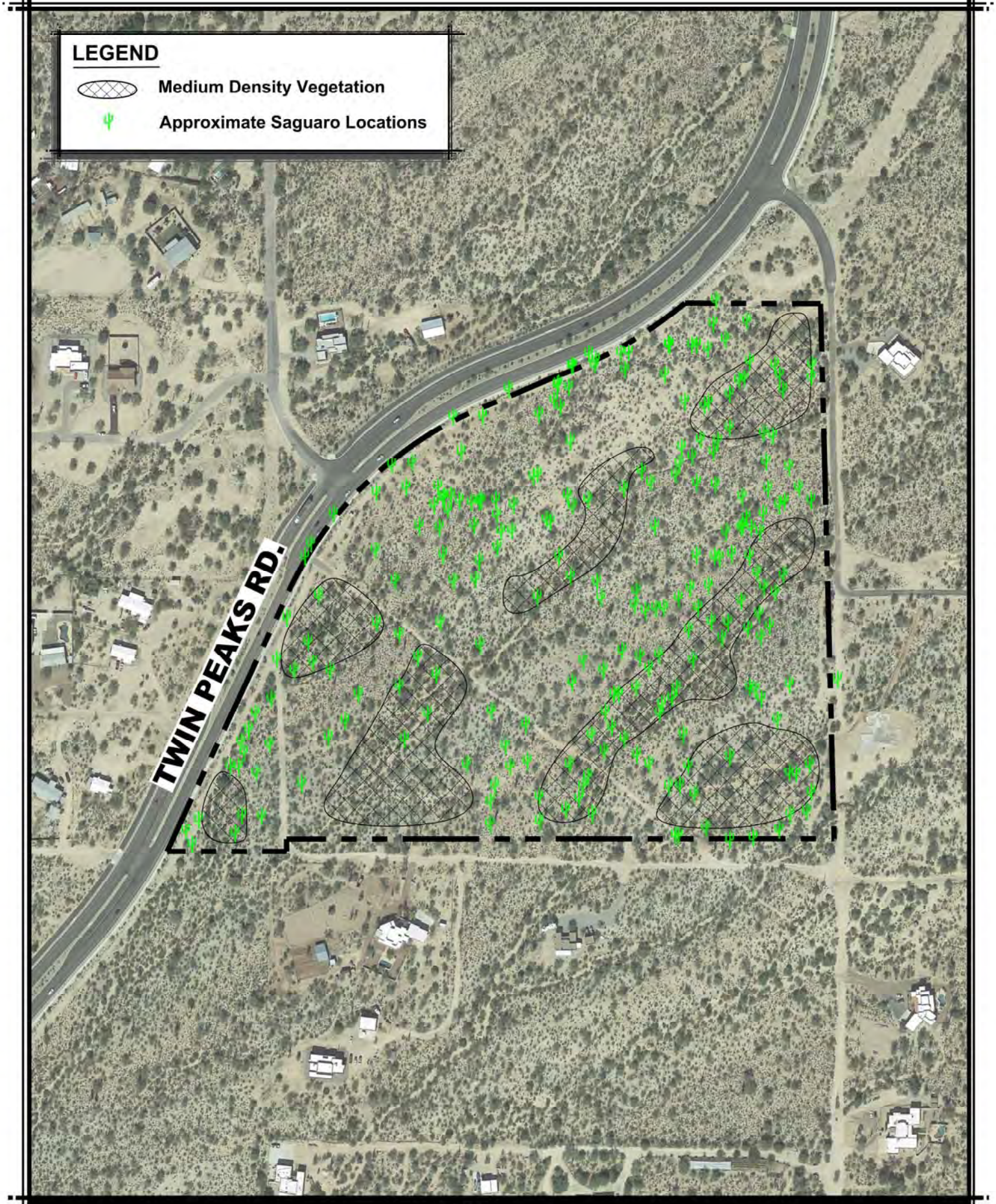
   Site vegetation substantially consists of undisturbed Arizona Upland Sonoran Desert Scrub Biotic Community. The dominant plant association is the Paloverde-mixed cacti community. Species include mesquite, acacia, ironwood, foothills paloverde, creosote bush, and ocotillo, prickly pear, and fishhook barrel cactus. A large number of mature saguaro exists within the subject site.

2. Significant, Threatened, or Endangered Flora

   Illustrated on the significant vegetation exhibit. No threatened or endangered flora are known to exist on site.

3. Vegetative Densities

   Vegetative density of the subject site is approximately 30 percent plant cover.



The WLB Group WLB

Exhibit I
Significant Vegetation

WLB No. 114013-C-001

0' 300'

Q:\114013\C001 - Twin Peaks 34\01 Planning\04 Rezone or GPA\Site Analysis\Exhibits\I - Significant Vegetation.dwg Plotted: Aug. 18, 2016

E. Wildlife

1. Arizona Game and Fish Department Input

   The Arizona Game and Fish Department's online review tool has been completed, and the Environmental Review report, dated May 4, 2016, states that their most current records indicate the presence of federally listed species within a 3-mile radius of the project boundary along with an identified wildlife corridor.

   Proper steps will be taken during development to mitigate the occurrence of any listed fauna, should they be found onsite.

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:
Twin Peaks & Decker

User Project Number:
114013-C-001

Project Description:
Rezone for Residential Development

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

Contact Person:
justin currie

Organization:
wlb group

On Behalf Of:
CITY

Project ID:
HGIS-03535

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

Page 1 of 11

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 Department's review of site-specific projects.
3. The Department's 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 J: 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 Departments 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.

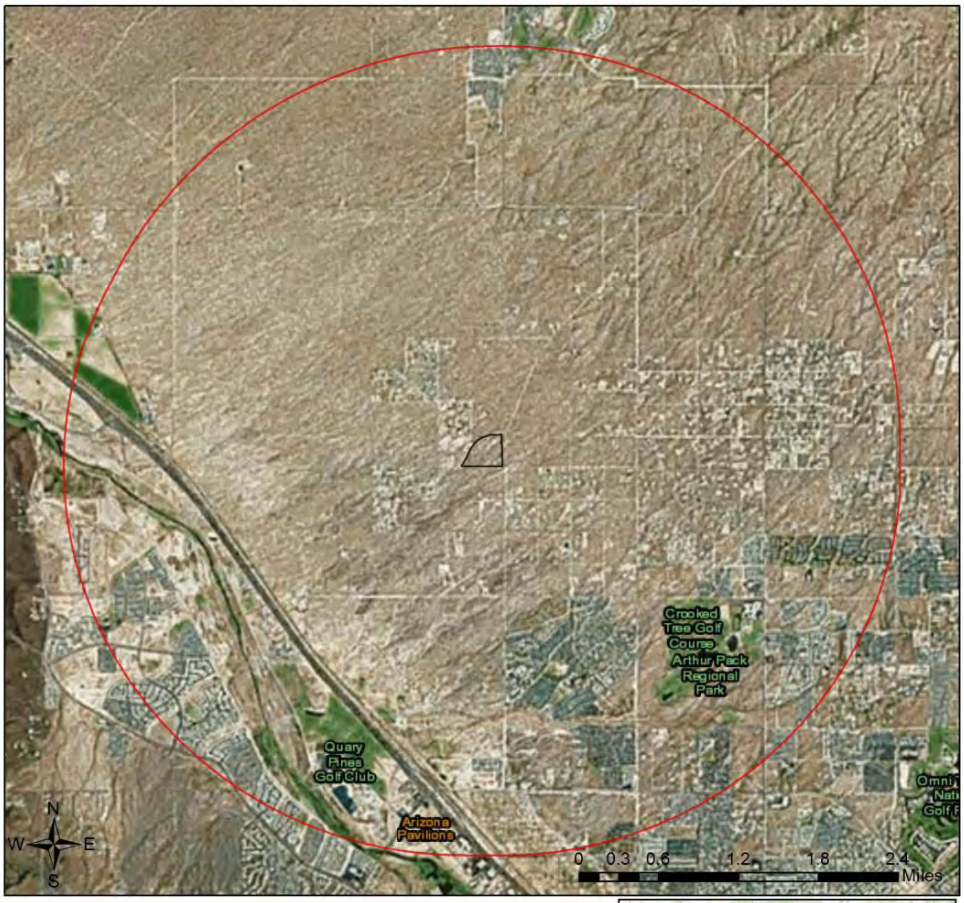
Exhibit J: AZGFD Report (cont'd)

Arizona Game and Fish Department
Project ID: HGIS-03535

project_report_twin_peaks_decker_18834_19256.pdf
Review Date: 5/4/2016 04:39:04 PM

Twin Peaks & Decker

Aerial Image Basemap With Locator Map



Project Boundary

Buffered Project Boundary

Project Size (acres): 36.21

Lat/Long (DD): 32.3969 / -111.0823

County(s): Pima

AGFD Region(s): Tucson

Township/Range(s): T12S, R12E

USGS Quad(s): RUELAS CANYON



Service Layer Credits: Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong),

Page 4 of 11

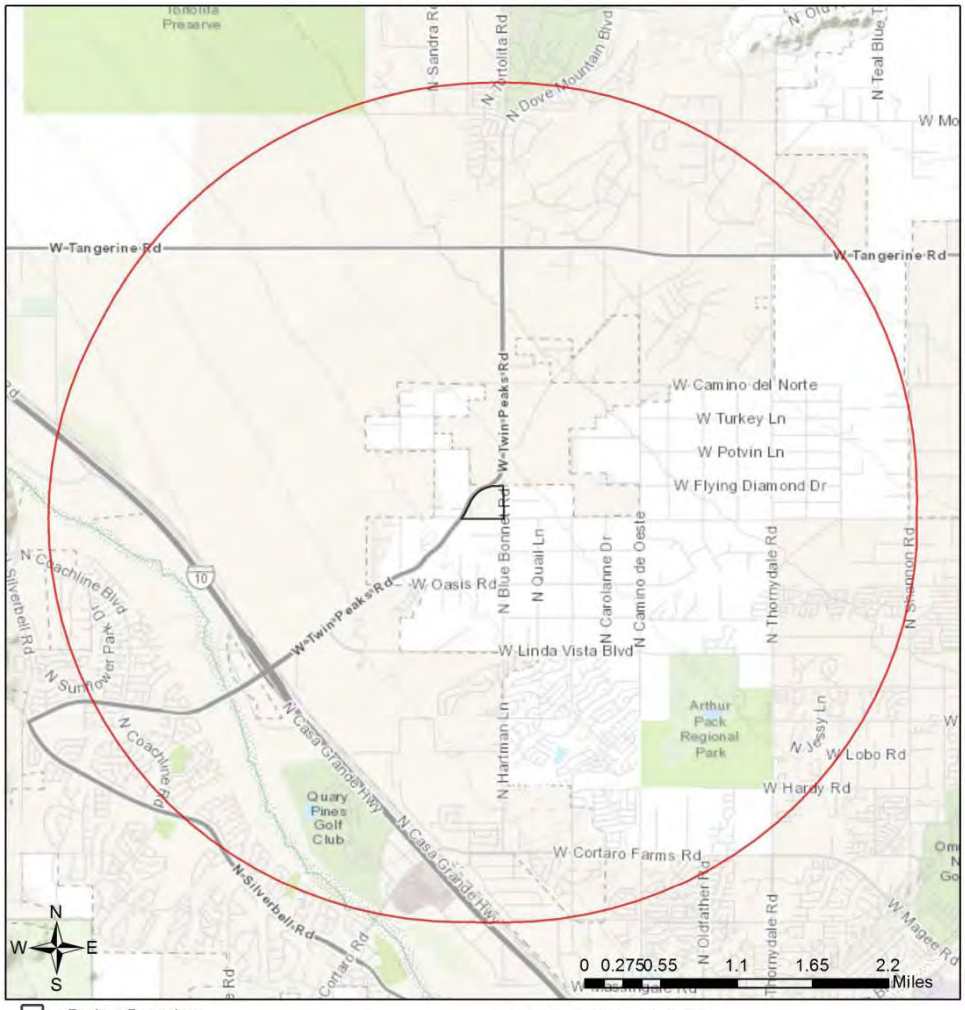
Exhibit J: AZGFD Report (cont'd)

Arizona Game and Fish Department
Project ID: HGIS-03535

project_report_twin_peaks_decker_18834_19256.pdf
Review Date: 5/4/2016 04:39:04 PM

Twin Peaks & Decker

Web Map As Submitted By User



Project Boundary

Buffered Project Boundary

Project Size (acres): 36.21

Lat/Long (DD): 32.3969 / -111.0823

County(s): Pima

AGFD Region(s): Tucson

Township/Range(s): T12S, R12E

USGS Quad(s): RUELAS CANYON

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

Page 5 of 11

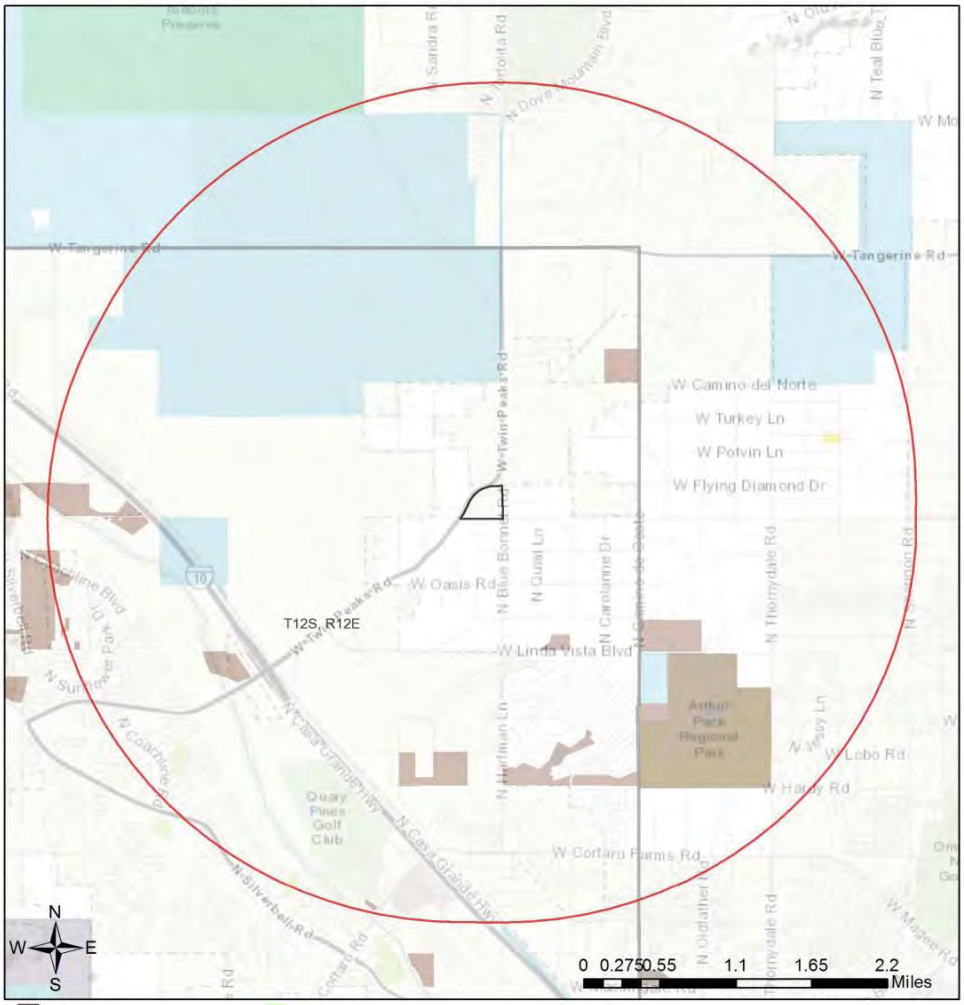
Exhibit J: AZGFD Report (cont'd)

Arizona Game and Fish Department
Project ID: HGIS-03535

project_report_twin_peaks_decker_18834_19256.pdf
Review Date: 5/4/2016 04:39:04 PM

Twin Peaks & Decker

Topo Basemap With Township/Ranges and Land Ownership



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

Project Size (acres): 36.21
Lat/Long (DD): 32.3969 / -111.0823
County(s): Pima
AGFD Region(s): Tucson
Township/Range(s): T12S, R12E
USGS Quad(s): RUELAS CANYON

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

Page 6 of 11

Exhibit J: AZGFD Report (cont'd)

Arizona Game and Fish Department — project_report_twin_peaks_decker_18834_19256.pdf
Project ID: HGIS-03535 — Review Date: 5/4/2016 04:39:04 PM

Special Status Species and Special Areas Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Coyote - Ironwood - Tucson Linkage Design	Wildlife Corridor					
Dendrocygna bicolor	Fulvous Whistling-Duck	SC				
Glaucidium brasilianum cactorum	Cactus Ferruginous Pygmy-owl	SC	S	S		1B
Gopherus morafkai	Sonoran Desert Tortoise	C CA	S			1A
Leptonycteris curasoae yerbabuenae	Lesser Long-nosed Bat	LE				1A
Tucson - Tortolita - Santa Catalina Mountains Linkage Design	Wildlife Corridor					
Tumamoca macdougalii	Tumamoc Globeberry		S	S	SR	

Note: Status code definitions can be found at http://www.azgfd.gov/w_c/edits/hdms_status_definitions.shtml

Species of Greatest Conservation Need
Predicted within Project Vicinity 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
Anthus spragueii	Sprague's Pipit	C*				1A
Antrostomus ridgwayi	Buff-collared Nightjar		S			1B
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Aspidoscelis stictogramma	Giant Spotted Whiptail	SC	S			1B
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Botaurus lentiginosus	American Bittern					1B
Buteo regalis	Ferruginous Hawk	SC		S		1B
Chilomeniscus stramineus	Variable Sandsnake					1B
Chionactis occipitalis klauberi	Tucson Shovel-nosed Snake	SC				1A
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
Crotaphytus nebrius	Sonoran Collared Lizard					1B
Cynanthus latirostris	Broad-billed Hummingbird		S			1B
Cyprinodon macularius	Desert Pupfish	LE				1A
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

Page 7 of 11

Exhibit J: AZGFD Report (cont'd)

Arizona Game and Fish Department — project_report_twin_peaks_decker_18834_19256.pdf
Project ID: HGIS-03535 — Review Date: 5/4/2016 04:39:04 PM

Species of Greatest Conservation Need
Predicted within Project Vicinity based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Gopherus morafkai	Sonoran Desert Tortoise	C*	S			1A
Haliaeetus leucocephalus	Bald Eagle	SC, BGA	S	S		1A
Heloderma suspectum	Gila Monster					1A
Hypsiglena sp. nov.	Hooded Nightsnake					1B
Incilius alvarius	Sonoran Desert Toad					1B
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		1B
Lasiurus blossevillii	Western Red Bat		S			1B
Lasiurus xanthinus	Western Yellow Bat		S			1B
Leopardus pardalis	Ocelot	LE				1A
Leptonycteris curasoae yerbabuenae	Lesser Long-nosed Bat	LE				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
Micruroides euryxanthus	Sonoran Coralsnake					1B
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
Panthera onca	Jaguar	LE				1A
Passerculus sandwichensis	Savannah Sparrow					1B
Perognathus amplus	Arizona Pocket Mouse					1B
Perognathus longimembris	Little Pocket Mouse					1B
Peucaea botterii arizonae	Arizona Botteri's Sparrow			S		1B
Peucaea carpalis	Rufous-winged Sparrow					1B
Phrynosoma solare	Regal Horned Lizard					1B
Phyllorhynchus browni	Saddled Leaf-nosed Snake					1B
Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE				1A
Progne subis hesperia	Desert Purple Martin			S		1B
Setophaga petechia	Yellow Warbler					1B
Sonorella papagorum	Black Mountain Talussnail					1B
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B
Thomomys umbrinus intermedius	Southern Pocket Gopher					1B
Troglodytes pacificus	Pacific Wren					1B
Vireo bellii arizonae	Arizona Bell's Vireo					1B

Page 8 of 11

Exhibit J: AZGFD Report (cont'd)

Species of Greatest Conservation Need
Predicted within Project Vicinity based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Vulpes macrotis	Kit Fox					1B

Species of Economic and Recreation Importance Predicted within Project Vicinity

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 single dwelling 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 the home page of this application at http://www.azgfd.gov/hgis/guidelines.aspx.

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.

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, cantered, or cut to ensure that light reaches only areas needing illumination.

Exhibit J: AZGFD Report (cont'd)

Minimize potential introduction or spread of exotic invasive species. Invasive species can be plants, animals (exotic snails), and other organisms (e.g., microbes), which may cause alteration to ecological functions or compete with or prey upon native species and can cause social impacts (e.g., livestock forage reduction, increase wildfire risk). The terms noxious weed or invasive plants are often used interchangeably. Precautions should be taken to wash all equipment utilized in the project activities before leaving the site. Arizona has noxious weed regulations (Arizona Revised Statutes, Rules R3-4-244 and R3-4-245). See Arizona Department of Agriculture website for restricted plants, https://agriculture.az.gov/. Additionally, the U.S. Department of Agriculture has information regarding pest and invasive plant control methods including: pesticide, herbicide, biological control agents, and mechanical control, http://www.usda.gov/wps/portal/usdahome. The Department regulates the importation, purchasing, and transportation of wildlife and fish (Restricted Live Wildlife), please refer to the hunting regulations for further information http://www.azgfd.gov/h_f/hunting_rules.shtml

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.

Based on the project type entered, coordination with Arizona Department of Water Resources may be required (http://www.azwater.gov/azdwr/default.aspx).

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.

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.

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/environmental-services/np1

Exhibit J: AZGFD Report (cont'd)

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
2321 W. Royal Palm Rd, Suite 103
Phoenix, AZ 85021
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: http://www.azgfd.gov/hgis/pdfs/TortoiseHandlingGuidelines.pdf.

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: http://www.azgfd.gov/hgis/documents/FINALLecuyeHabitatGdln.pdf.

Analysis indicates that your project is located in the vicinity of an identified wildlife habitat linkage corridor. Project planning and implementation efforts should focus on maintaining adequate opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: http://www.corridordesign.org/arizona. Please contact your local Arizona Game and Fish Department Regional Office for specific project recommendations: http://www.azgfd.gov/inside_azgfd/agency_directory.shtml.

F. Soils and Geology

1. Soils

   The National Resources Conservation Service notes the subject property as " Hayhook- Sahuarita Complex 1 to 5 percent slopes, Palos Verdes-Jaynes Complex 2 to 8 percent slopes, Hayhook Sandy Loam 1 to 5 percent slopes." These designations are typical of the Tortolita Fan area and are characterized by well-draining sandy soil on the surface, with gravelly soil several feet below. Detailed geotechnical investigation will be performed prior to development.

2. Geology

   The project lies within the Tortolita Fan area, which falls into the Santa Cruz River basin valley. The US Geological Survey further describes this area as, "QTa: Alluvium & Sedimentary Rock. Unconsolidated to well-consolidated and caliche – cemented sand, silt, and gravel and dissected basin-fill deposits of conglomerate, sandstone, and siltstone with minor lacustrine rocks."

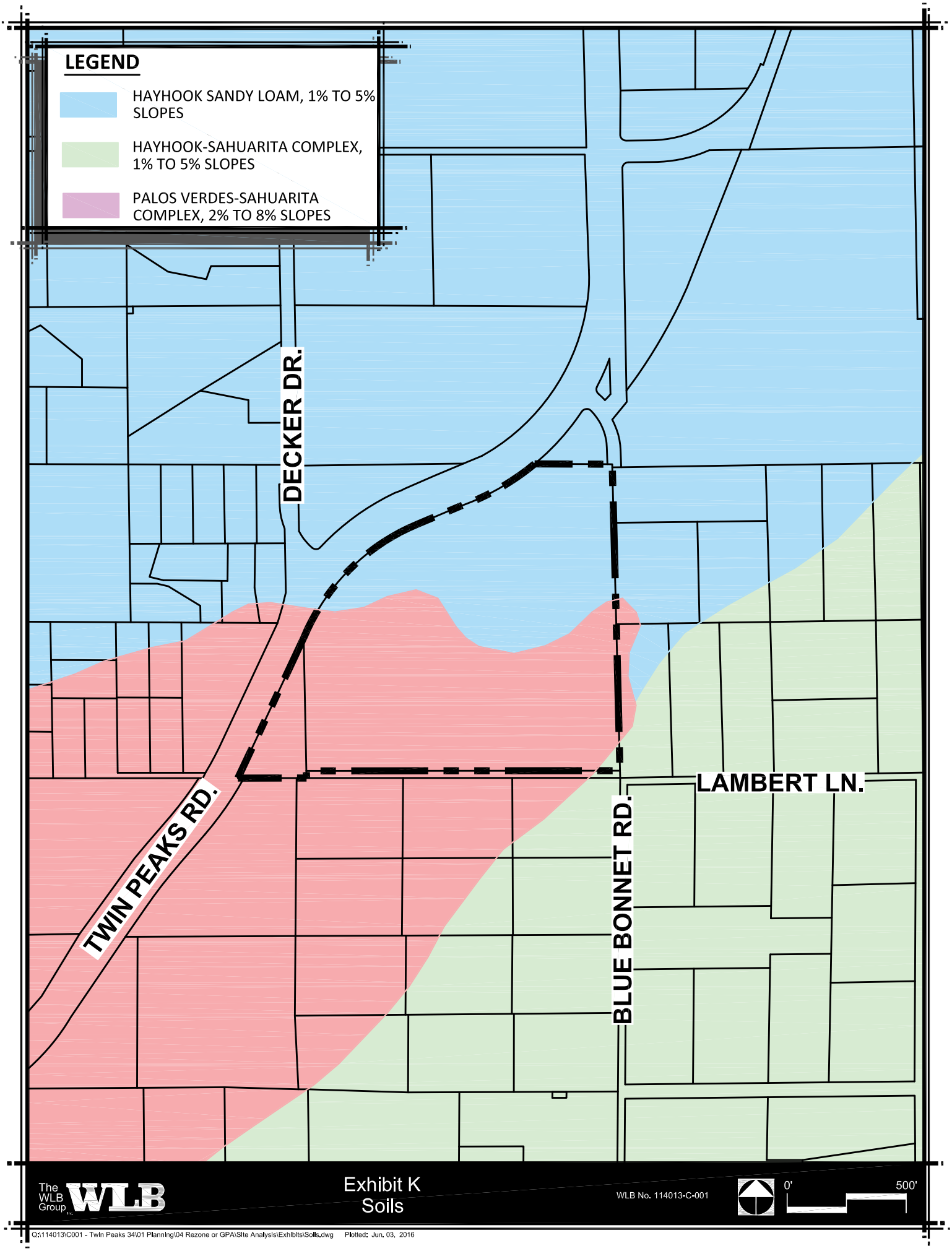
G. Viewsheds

1. Viewsheds from Adjacent Properties

   Primary views of the Tortolita Mountains to the north and Pusch Ridge and Catalina Mountains to the east. Development of the subject property will not block these views for the existing homes in the area. (See Exhibit M: Viewsheds for more information.)

2. Site Visibility

   Views into the subject site are somewhat restricted due to existing vegetation and the relatively even and flat nature of the topography that typifies the area.



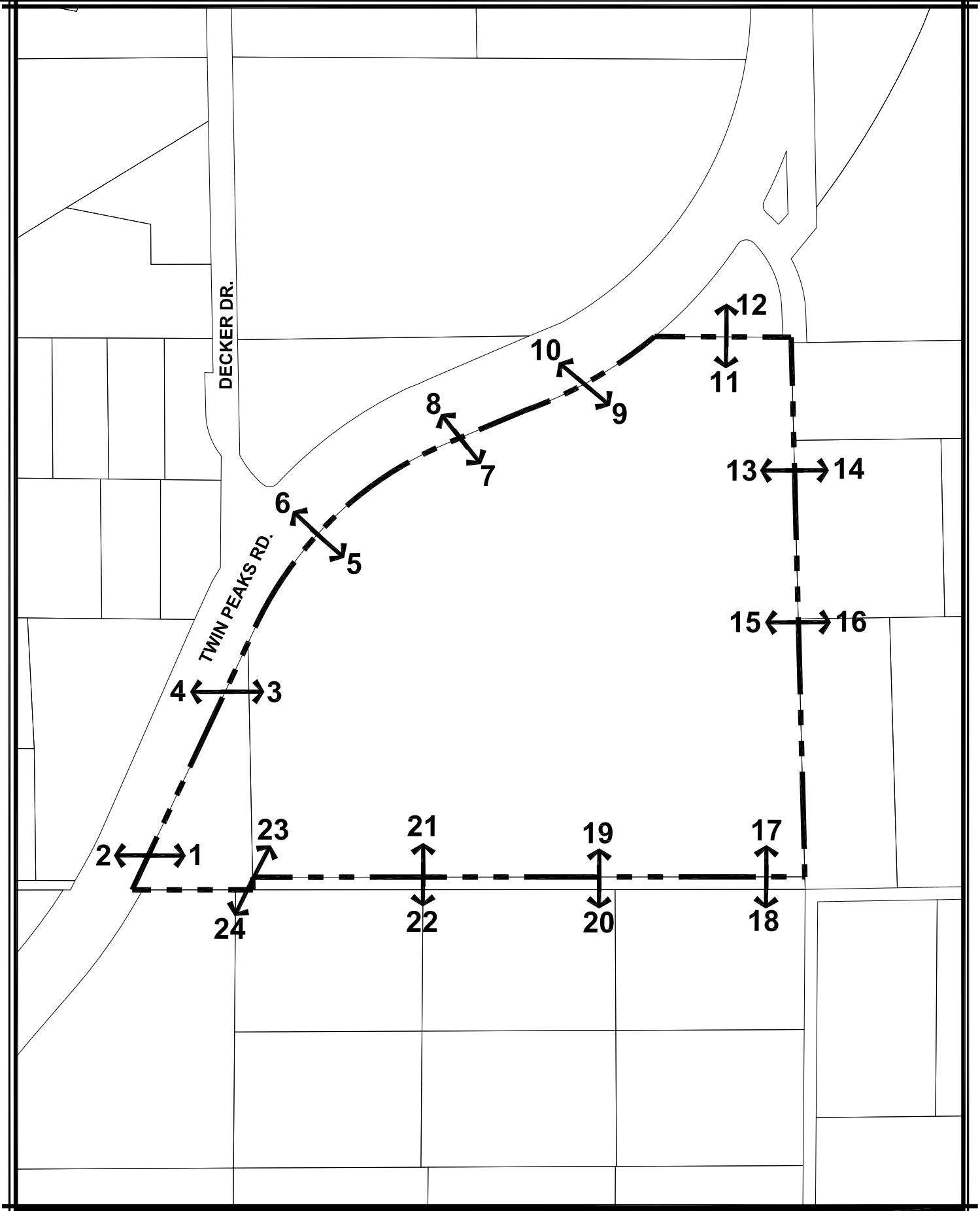
The WLB Group WLB

Exhibit K
Soils

WLB No. 114013-C-001

0' 500'

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The WLB Group Inc. WLB

Exhibit L
Viewshed Photo Location Key Map

WLB No. 114013-C-001

0' 300'

Q:\114013\C001 - Twin Peaks 34\01 Planning\04 Rezone or GPA\Site Analysis\Exhibits\Viewshed.dwg Plotted: Jun. 03, 2016

Photo #1



Photo #2



Photo #3



Photo #4



Photo #5



Photo #6



Photo #7



Photo #8



Photo #9



Photo #10



Photo #11



Photo #12



Photo #13



Photo #14



Photo #15



Photo #16



Photo #17



Photo #18



Photo #19



Photo #20



Photo #21



Photo #22



Photo #23



Photo #24



H. Traffic

1. Existing / Proposed Off-site Streets between the Development and Nearest Arterial Streets

   The development has one entry, which is onto Twin Peaks Road. Now that Twin Peaks Road has been improved, the 2040 P.A.G. Regional Transportation Plan proposes no additional improvements within a mile of the project, and the existing arterial roadway system has ample capacity to support this project.

2. Nearby Arterial Streets

   All traffic generated by this project will be accommodated by Twin Peaks Road. An analysis of capacity has been prepared by Southwest Traffic Engineering. (See Exhibit V: Circulation Concept Plan & Appendix A: Traffic Impact Analysis)

   Twin Peaks Road

   150 foot Right-of-Way
   Four lane divided roadway with bicycle lanes and landscaped median 45 MPH speed limit
   Large wash channeled underneath road via culverts at intersection with Camino de Mañana.

3. Nearby Arterial Intersections

   Arterial intersections within one mile of the site that will likely carry traffic generated by this development include Twin Peaks Road and Camino de Mañana, and Camino de Mañana and Camino de Oeste.

4. Nearby Bicycle / Pedestrian Ways

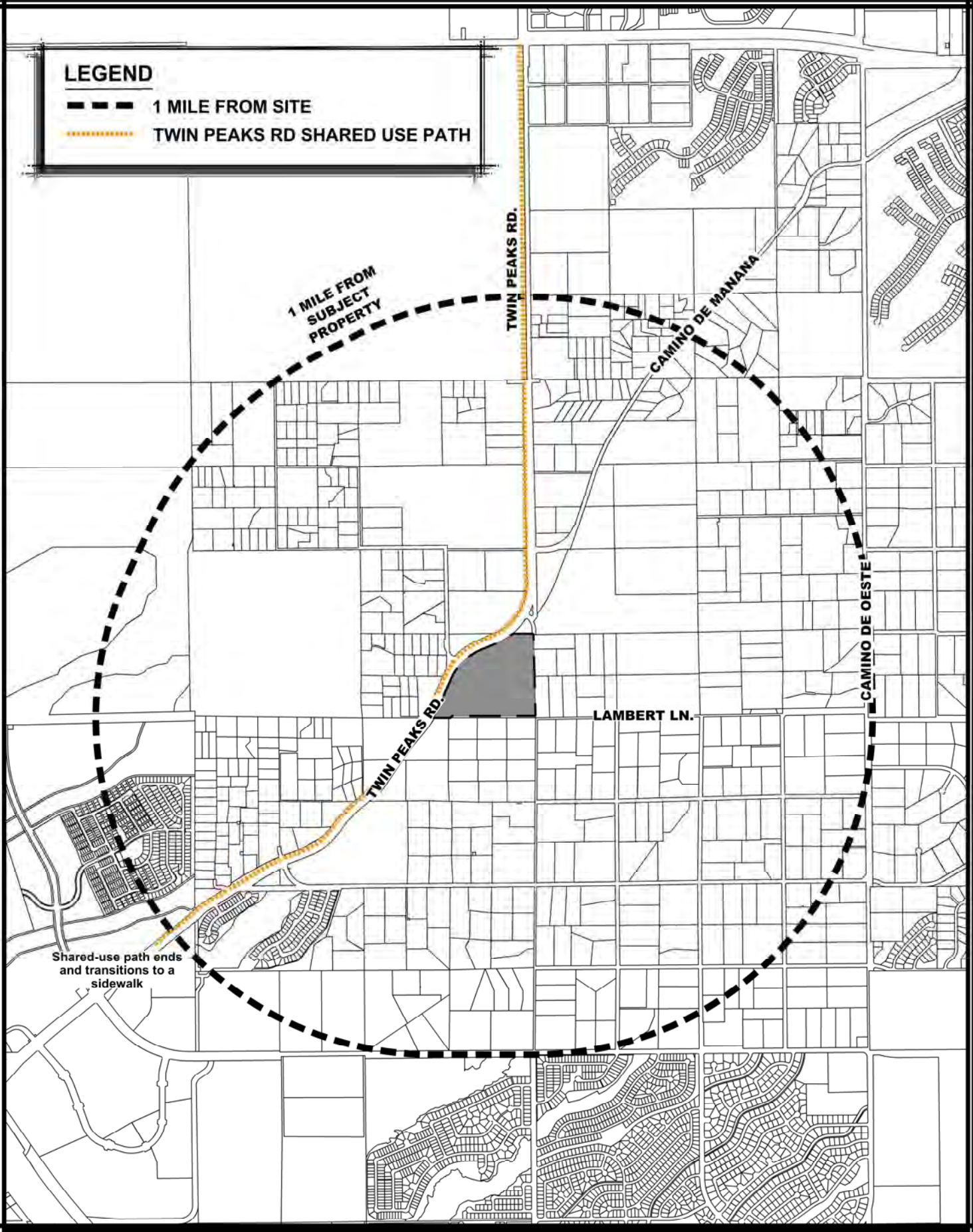
   A shared-use path, a sidewalk, and multi-use lanes are provided alongside the nearby Twin Peaks Road.

I. Recreation and Trails

1. Trails, parks and recreation areas within one mile of site.

   No existing parks are within one mile of the project site. There are proposed recreation areas within two recently approved Specific Plans just north of the subject property. The surrounding area currently contains passive recreational opportunities, including open space areas and the shared use path along Twin Peaks Road. This residential development project will provide an easement for a linkage to the regional trail network. (See Exhibit M: Trails for more information.)

   This project supports the goals of the Pima County Trail System Master Plan and the Town of Marana Parks, Recreation, Trails, and Open Space Master Plan by connecting to the existing Twin Peaks Road trail system. Two regional or district parks with a combined area of 72.8 acres have been planned but not yet developed at the nearby Cascada subdivision development. This is in addition to the several neighborhood parks within the Cascada development.



The WLB Group WLB

Exhibit M
Trails

WLB No. 114013-C-001

0' 2000'

Q:\114013\C001 - Twin Peaks 34\01 Planning\04 Rezone or GPA\Site Analysis\Exhibits\Trails.dwg Plotted: Jul. 20, 2016

J. Cultural, Archaeological, and Historic Resources

1. On-site Resources

   Minimal, see below.

2. Archaeologist Letter

   According to Bowers Environmental three sites where documented in the project boundary. Each of the sites is historic in age and likely dates to the 1940s and 1950s. Both have been evaluated in terms of ARHP and NRHP criteria. Research regarding these historic sites does not suggest that they are associated with a significant person or important historical events. The sites do not appear to embody distinctive characteristics or artistic values that would make them exceptional or a unique type. The sites are in poor to fair condition, lack any architectural distinction in terms of design, materials or craftsmanship. Accordingly, MCA Consulting recommends that these three sites are not eligible for inclusion on either the Arizona or National Register of Historic Places. (See Exhibit N: Archaeological Survey Summary)

ABSTRACT

Report Title: Twin Peaks Vista Class III Cultural Resources Survey of 33.4 Acres Along West Twin Peaks Road, Pima County, Arizona

Project Name: Twin Peaks Vista Class III Cultural Resources Survey

Project Location: The Area of Potential Effects (APE) is located east of West Twin Peaks Road, west of North Blue Bonnet Road, and north of West Lambert Lane, Marana, Pima County, Arizona (Parcels 216-23-073D, 216-23-072B)

Project Locator UTM: 492290 m E 3584450 m N **Zone:** 12 N (NAD 83)

Project Sponsor: Bowers Environmental and Meritage Homes

Sponsor Project Number(s): Twin Peaks 34 Job #114013-C-001

Lead Agency: US Corps of Engineers

Other Involved Agencies: ASM, Arizona SHPO

Applicable Regulations: Section 106 of the National Historic Preservation Act of 1966

Funding Source: Private

ASLD ROW Application Number: N/A

Description of the Project/Undertaking: The proposed project consists of development of the property into a residential subdivision.

Area of Potential Effects (APE): The APE for direct effects is defined as that area that would be directly impacted by the ground breaking and construction activities associated with the proposed undertaking. This consists of one roughly triangular-shaped land block encompassing 33.4 acres.

Legal Description: Township 12 South, Range 12 East, within the SE¼ of the SE¼ of Section 11, (G&SRB&M) (*Ruelas Canyon, Ariz.* 7.5' USGS Quadrangle).

Land Jurisdiction: Private

Total Acres: 33.4

Acres Surveyed: 33.4

Acres Not Surveyed: 0

Consultant Firm/Organization: MCA Consulting

Project Number: MCA 2016.017

Permit Number(s): AAA 016-033bl

Date(s) of Fieldwork: April 21-22, 2016

Number of IOs Recorded: 6

Number of Sites Recorded: 3

Eligible Sites: 0

Ineligible Sites: 3

Unevaluated Sites: 0

Sites Not Relocated: 0

Site Summary Table

Land Jurisdiction	Site Number/ Property Address	Eligibility Status/ Criterion/Criteria	Recommended Treatment
Private	AZ AA:12:1159(ASM)	Recommended not eligible	No further treatment
Private	AZ AA:12:1160(ASM)	Recommended not eligible	No further treatment
Private	AZ AA:12:1161(ASM)	Recommended not eligible	No further treatment

Comments: Three newly recorded historic period archaeological sites and six isolated occurrences of artifacts were recorded within the APE. All of these cultural resources are recommended as not eligible for inclusion on the Arizona and National Register of Historic Places. Accordingly, there are no historic properties affected in the project. No further treatment is recommended for the sites or isolates recorded in the project.

K. Existing Infrastructure and Public Facilities

1. Sewer

   The Twin Peaks corridor, including this property, is tributary to Pima County's Ina Road wastewater treatment plant. The project will connect to the Pima County Regional Wastewater Reclamation Department sewer system near the intersection of Linda Vista Road and Blue Bonnet Road.
   Capacity has been confirmed for two projects in the area (The Preserve at Twin Peaks and Twin Peaks Vista) and we are currently working with Pima County Regional Wastewater Reclamation Department to connect this project at the intersection mentioned above.

2. Water

   This project is within the Town of Marana water service area. A 16" water main exists within the Twin Peaks Road right-of-way, but is within the wrong water pressure zone to serve this project. The planned Blue Bonnet reservoir and booster station are to be constructed by others. This project will connect to the Marana Water system once the booster station is operational.

3. Natural Gas

   The property is located within the Southwest Gas service area.

4. Electric

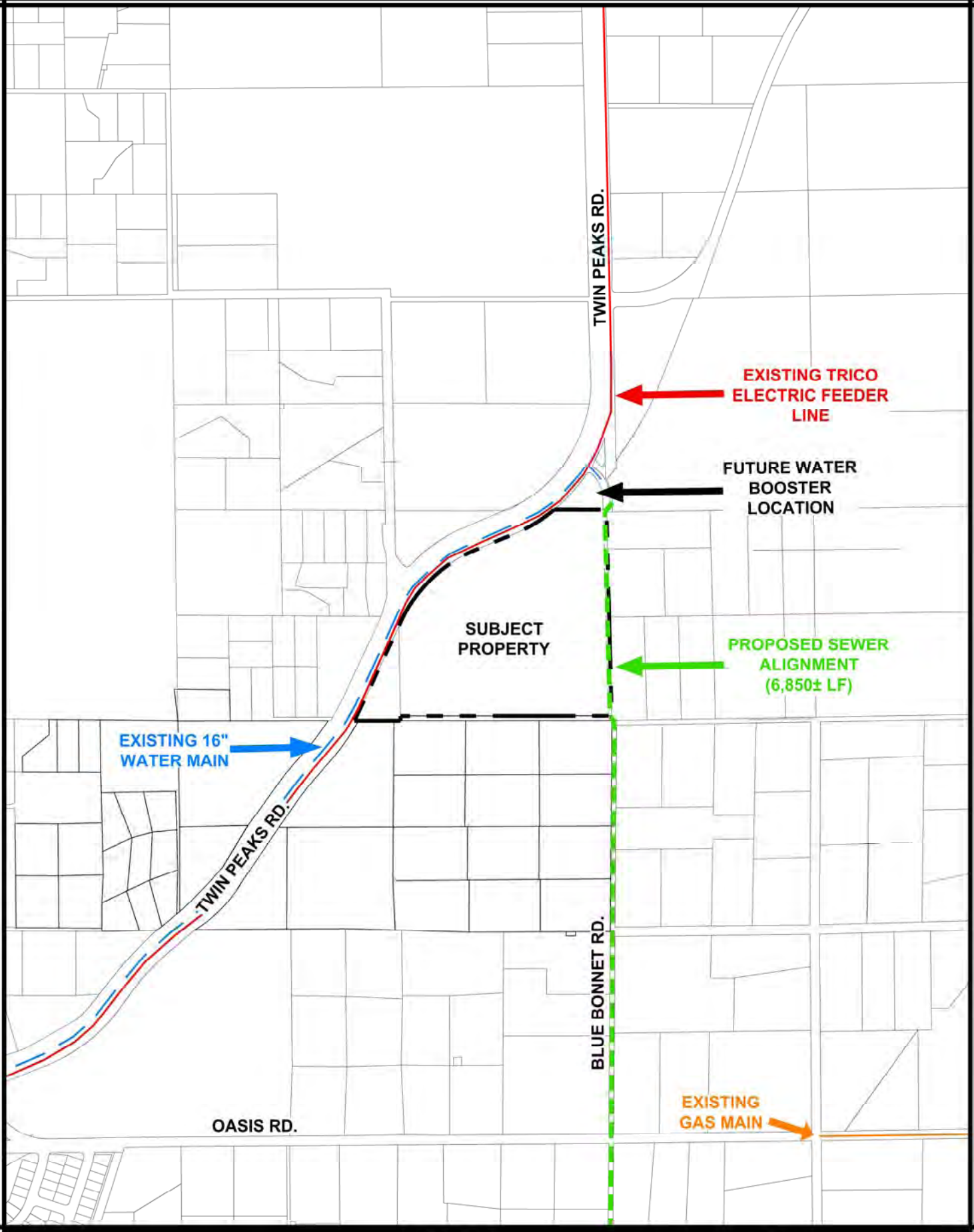
   The property is located within the TRICO Electric service area and electric lines are currently located in the southwest corner of the project boundary along Decker Dr.

5. Fire Service

   The property has been annexed into the Mountain Vista Fire District, which has indicated that they may locate a new facility in the area in the future, but at this point are unsure. The nearest fire station is at Shannon and Overton.

6. Police Service

   The property is located within the Town of Marana Police service area and will be providing service.



The WLB Group WLB

Exhibit O
Existing Utility Infrastructure

WLB No. 114013-C-001

0' 800'

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Exhibit P: Sewer Capacity Letter

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

JACKSON JENKINS
DIRECTOR

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

June 8, 2016

Linda Thompson
The WLB Group
4444 E Broadway
Tucson, Arizona 85711

Sewerage Capacity Investigation No. 2016-137 Type I

RE: **Twin Peaks 34, Parcel 21623073D, 21623072B**
Estimated Flow 11,880 gpd (ADWF).
P16WC00139

Greetings:

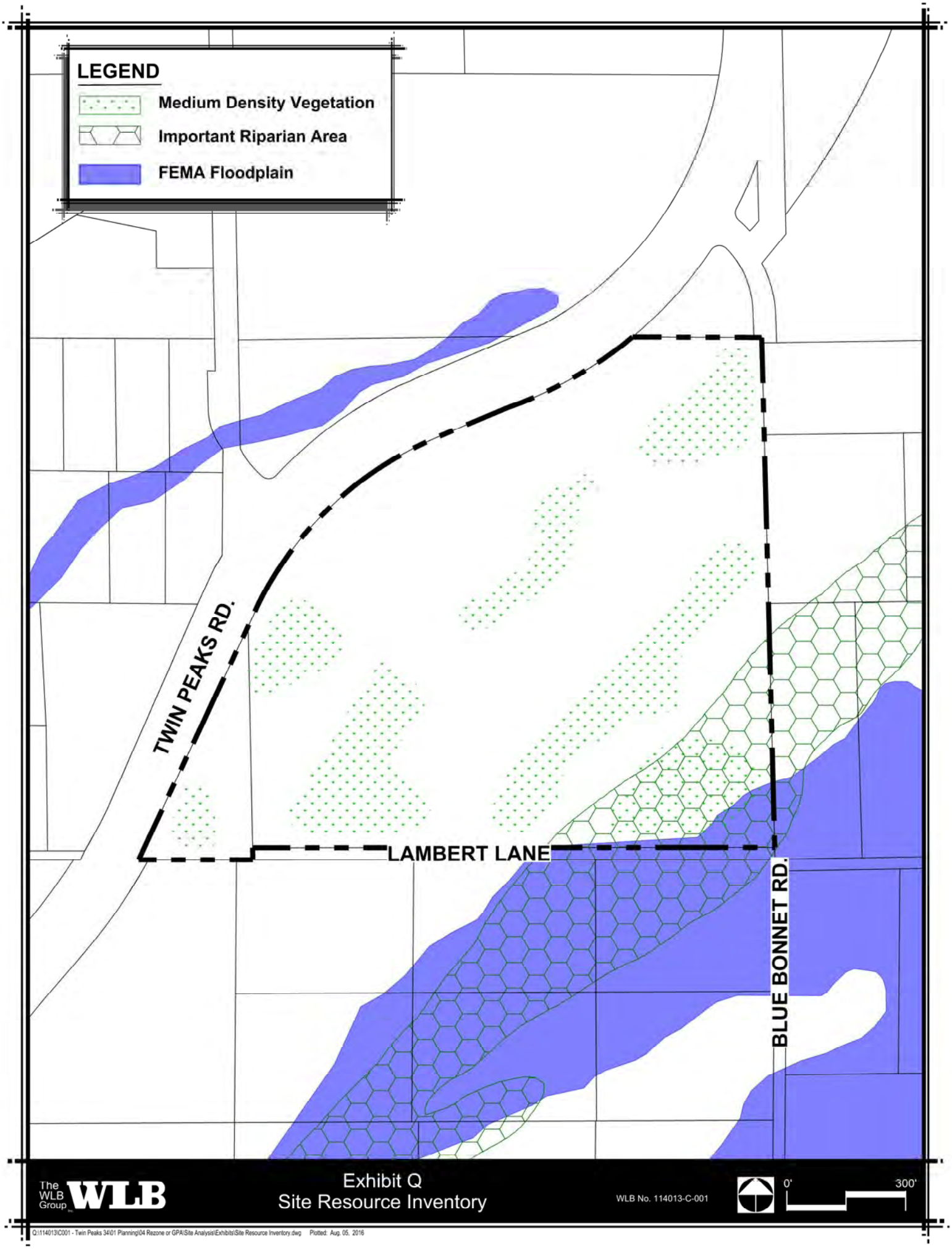
The above referenced project is tributary to the Tres Rios Water Reclamation Facility via the Continental Ranch Interceptor.

Capacity is currently available for this project in the public sewer S-665-003, downstream from manhole 5175-21.

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 and valid for one year.

If further information is needed, please feel free to contact us at (520) 724-6642.

Reviewed by: Kurt Stemm, CEA Sr.



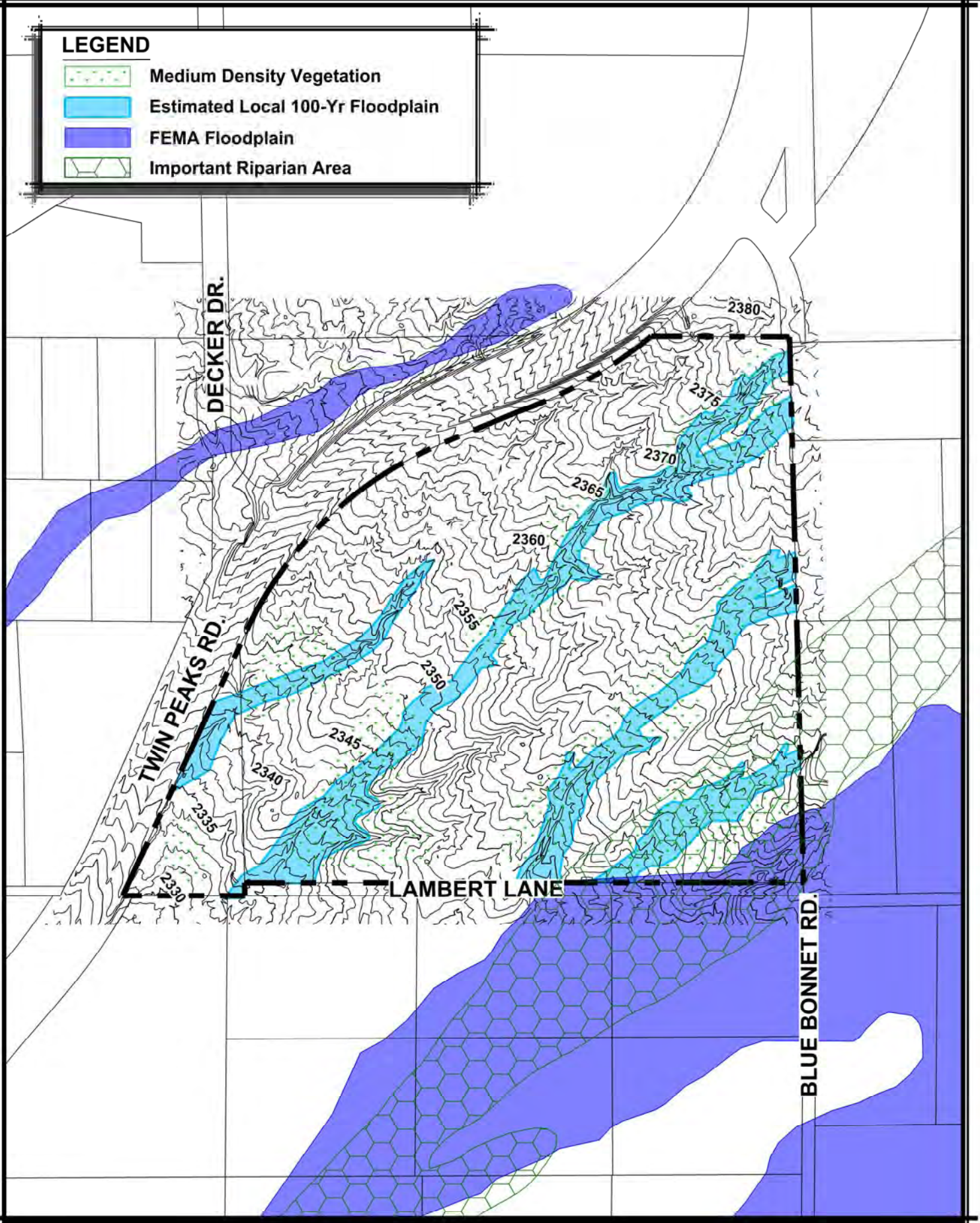
The WLB Group WLB

Exhibit Q
Site Resource Inventory

WLB No. 114013-C-001

0' 300'

Q:\114013\C001 - Twin Peaks 3401 Planning\04 Rezone or GPA\Site Analysis\Exhibits\Site Resource Inventory.dwg Plotted: Aug. 05, 2016



The WLB Group WLB

Exhibit R
McHarg Composite Map

WLB No. 114013-C-001

0' 300'

Q:\114013\C001 - Twin Peaks 3401 Planning\04 Rezone or GPA\Site Analysis\Exhibits\R - McHarg Composite Map.dwg Plotted: Aug. 18, 2016

III. Land Use Plan

A. Purpose and Intent

This section describes how the development responds to the opportunities and constraints described in the Inventory & Analysis section of this rezone along with the Town of Marana Land Development Code. As evidenced by the site plan, the project rezone has been crafted after careful and responsive consideration of the site's context.

B. Relationship to Town of Marana Adopted Plans

We are requesting a rezone to an R-6 residential designation and in doing so the project will adhere to all applicable development standards associated with the R-6 zoning requirements.

The Marana General Plan designates this property as Low Density Residential: 0.5-2.0 homes per acre. This project complies with that guideline despite the fact that greater density would be appropriate along the Twin Peaks corridor.

The Town of Marana Strategic Plan calls for new developments and neighborhoods to create areas with meaningful open space, trail connectivity, and active recreation areas which this rezone request adheres to. (See Exhibit S: Conceptual Development Plan)

The rezone also complies with not only the goals and guidelines but the entire Twin Peaks Corridor Study by adding to the brand that is to be characterized along Twin Peaks, creating a development with minimal visual impact on surrounding environment, and enhancing and preserving the native desert landscape. This project will also adhere to the general development regulations and use vegetation for landscaping from the low water use/drought tolerant native plant list detailed in the corridor study.

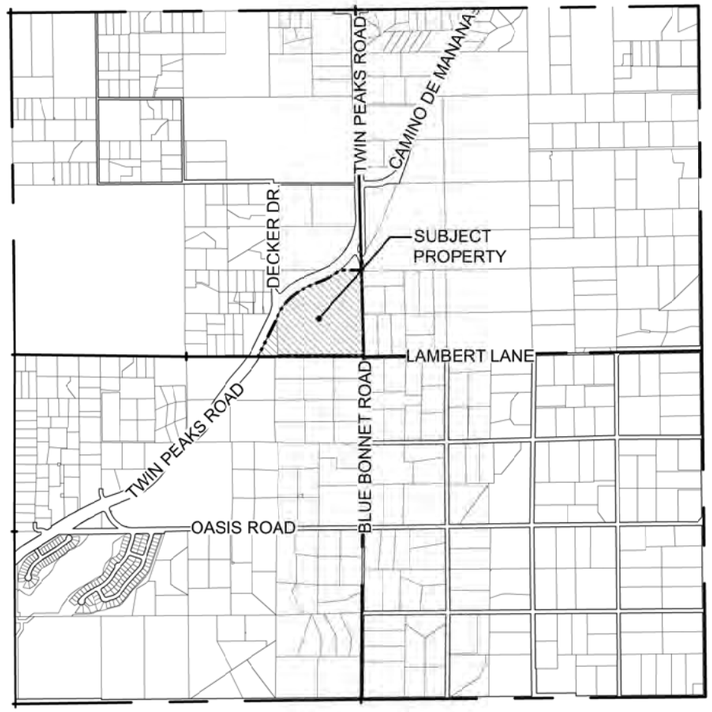
C. Compatibility to Adjoining Development

The project seeks to be compatible with surrounding land uses while maintaining appropriate and sufficient residential density to offset the cost of extending sewer and other utilities to the vicinity. The rezone features a density that is in line with the Marana General Plan, the Twin Peaks Corridor Study, and proposed and existing development along Twin Peaks Road.

D. Land Use Proposal

This project is designed to blend with surrounding low density residential land uses and current undeveloped areas. Home sites are set back from adjacent properties, especially along the southern border of the project where larger lots (±1 acre) are propose. The project proposes a total of 59 lots ranging in size from 6,000 sq. ft. (42 lots), one-half acre (12 lots), and one acre lots (5 lots). All the lots within the development will be subject to the Town of Marana Residential Design Standards. Open space is primarily located along existing washes and the perimeter of the project to serve as a buffer to existing residents. Landscaping also exists within these buffer areas to provide visual screening between the homes within the development and existing neighbors. Although the lots proposed are of the sizes typically desired by large homebuilders, the overall density of this project is relatively low (approximately 1.7 homes per acre), resulting in a low traffic impact on nearby roadways.





SITE LOCATION MAP

LEGEND

Proposed Private Trails:

Proposed Public Trails:

Single-Story Restriction Indicated By: S

Proposed Homesites:	50'x120'	(42: Lots 1-42)
	One-Half Acre	(12: Lots 43-54)
	One Acre	(5: Lots 55-59)

GENERAL NOTES

Property Size:	34.2 Ac.
Existing Zoning:	R-144
Proposed Zoning:	R-6
Proposed Homesites:	59
Proposed Density:	1.7 Homes per Acre
Open Space:	10.3 Acres (30%)

The WLB Group WLB

Twin Peaks & Lambert Lane
Exhibit S - Conceptual Development Plan

2016.09.27
WLB No. 114013-C-001

0' 200'

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E. Grading Concept

Site grading will be restricted to roadways, lots, and necessary ancillary grading. Except for areas where regional sewer depth is a design constraint, improvements within this project will be located at or near existing grade in order to avoid excessive alteration of the site's gently sloping terrain.

F. Post-Development Hydrology

Significant drainageways on-site will be preserved in their natural state, within the common area. Additional stormwater runoff created by new homes and roadways will be collected in landscaped detention basins. By largely avoiding disturbance of existing drainageways, and spreading stormwater detention throughout the project, impacts to up- and downstream drainage patterns are mitigated, and erosion issues will be prevented.

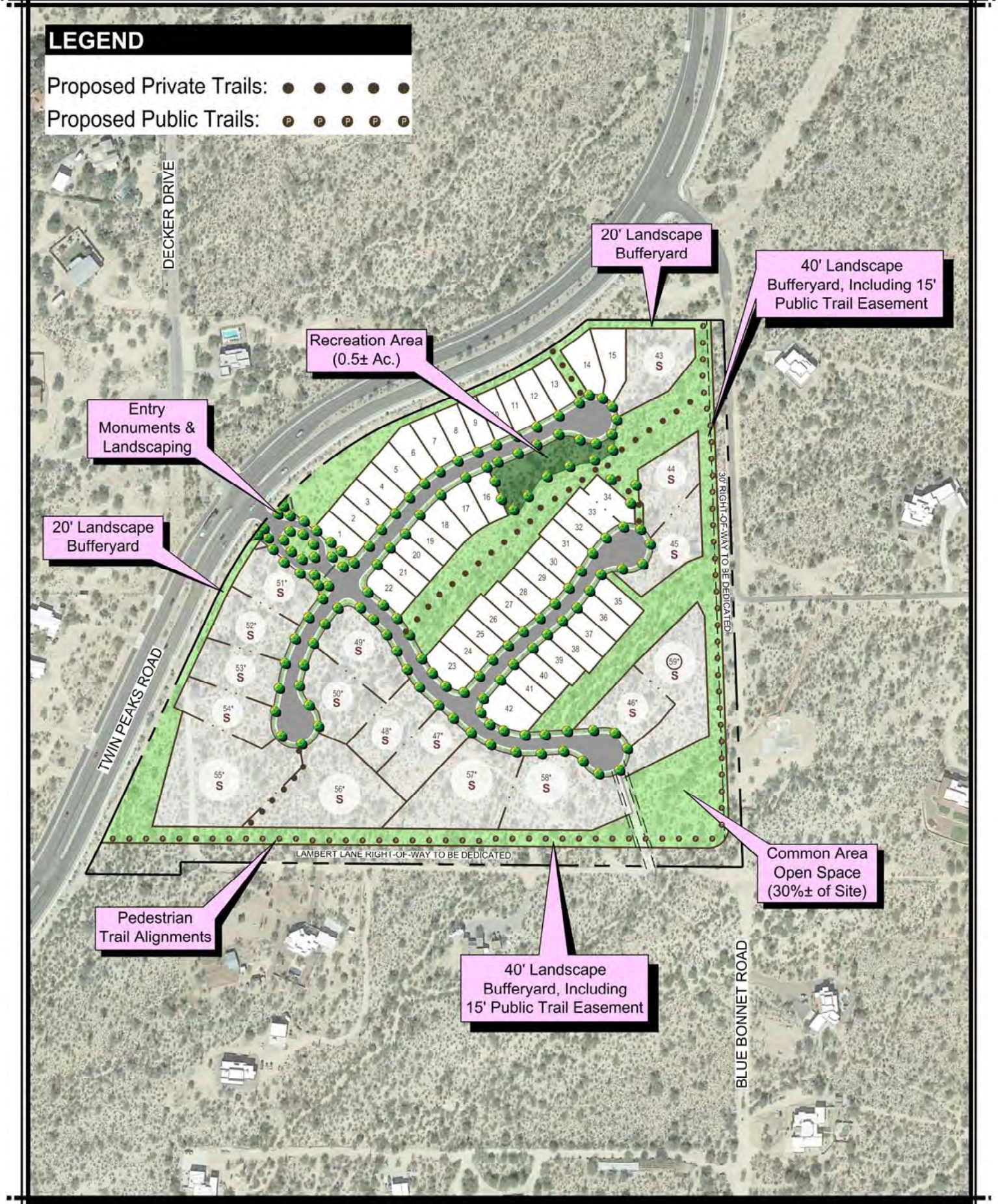
The Town of Marana adopted Title 25 of the Land Development Code with an effective date of October 18, 2007. To comply with this Title, a Stormwater Pollution Prevention Plan and NOI for coverage under the AZPDES Construction General Permit is required to be submitted to the Town for review and acceptance prior to commencement of grading activities. Construction/storage yards, construction trailers, fencing, water pumps/ponds and roads will be considered part of the larger plan of development and will need to be covered in the Stormwater Pollution Prevention Plan for this project.

All Federal permit requirements will need to be met prior to grading permit issuance. This includes Army Corps of Engineers Jurisdictional Wash consultation/determination if necessary.

G. Vegetation and Landscaping

Most significant vegetation found on-site is within the several on-site washes, all of which are preserved as common areas or on lot no-build areas. As part of the platting process, the Town of Marana's native plant preservation requirements (as defined in Section 17.02 of the Marana Land Development Code) will be followed and an inventory will be prepared for the entire site, identifying vegetation to be preserved in place or transplanted on site.

The development features 40' landscape buffers along the south and east boundaries and 20' landscape buffers along the north and west boundaries of the project site. The project also features drought tolerant landscaping, which further increases how well the project fits within the context of surrounding development in this arid region.



The WLB Group WLB

Exhibit T
Conceptual Landscape Plan

WLB No. 114013-C-001

0' 300'

Q:\114013\C001 - Twin Peaks 34\01 Planning\04 Rezone or GPA\Site Analysis\Exhibits\T - Concept Landscape Plan.dwg Plotted: Nov. 07, 2016

H. Wildlife

By preserving the washes on site, the primary wildlife corridors through the property are also protected.

At least 30 days before grading, a 100% area survey must be completed by a qualified wildlife biologist, for the Sonoran Desert Tortoise, with a copy of the survey form sent to the Town prior to issuance of a grading permit.

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, the wide open space corridors and perimeter buffer areas mitigate the project's minimal impacts to surrounding viewsheds.

J. Circulation Concept

One connection is proposed to the existing public street system, along Twin Peaks Road. The location of the point of connection was chosen to minimize impacts to existing washes, the available right-of-way frontage, roadway geometry, and also to minimize traffic impacts to the neighboring property owners. Internal streets will be designed and built to Town standards. Streets are intended to be private if the homebuilder elects to gate the neighborhood. Otherwise, they will be public streets. This project is expected to generate approximately 572 vehicular average daily trips (ADT), according to the Traffic Impact Analysis (TIA) submitted by Southwest Traffic Engineering, LLC, which is included in Appendix A.

45ft of right-of-way will be dedicated adjacent to the existing 30ft right-of-way of Lambert Ln for a total right-of-way width of 75ft. The western 30ft from the eastern property site boundary will also be dedicated as right-of-way for the future Blue Bonnet Rd. alignment.

K. Public Utilities

1. Water

The Town of Marana is extending water service to this area, although the development site is not currently serviced. Water service for this project will be extended from the future booster station to be constructed at the intersection of Blue Bonnet Road and Twin Peaks Road.

2. Sewer

Sewer service for this project will be extended from the existing sewer main that terminates just south of the intersection of Linda Vista Boulevard and Blue Bonnet Road. The main will be extended along Blue Bonnet Road, within the right-of-way and within easements. See Exhibit O.

PCRWRD has requested a 40ft sewer easement along the Blue Bonnet alignment. The easement has been granted, and extends 10' beyond the 30' Blue Bonnet right-of-way to be dedicated.

A 30' sewer easement will be dedicated through the site as necessary to facilitate the extension of sewer infrastructure to the Twin Peaks Vista development across Twin Peaks Road. The easement will be granted via the final plat. See Exhibit S.

3. Electric

   Electric service will come from Trico Electric Cooperative, Inc. (TRICO). The power source will come from TRICO's main feeder line along the east side of Twin Peak's Road. This feeder line exists along the project's western edge. There are also several points along the eastern edge to tie into the electrical infrastructure, if needed.

4. Natural Gas

   Southwest Gas will supply natural gas services to the proposed development. The closest existing gas facility exists at the intersection of Oasis Road and Quail Lane. The main will be extended if needed by the homebuilder.

5. Telecommunications

   The project is within the TRICO, Comcast, and CenturyLink service areas. Telecommunication service is proposed from these providers.

L. Public Service Impacts

1. Police

   The project is within Marana's town limits, and law enforcement jurisdiction. As a relatively low density residential project, impacts to Marana's police services are expected to be minimal.

2. Fire

   This project will be served by the Mountain Vista Fire District. Trash and Recycling
   The Town of Marana does not provide trash and recycling services. The project's homeowners association will contract with a private solid waste pick-up provider.

3. Schools

   The Marana Unified School District uses a student generation factor of 0.25 per home for elementary students and 0.1 per home for secondary students. This project's anticipated 58 homes would have an impact of 15 elementary students and 6 secondary students. De Grazia Elementary, Tortolita Middle School and Mountain View High School all have capacity to absorb this number of students. See attached letter from Marana Unified School District, which confirms that capacity exists for more houses than are currently proposed within this development.

Exhibit U: MUSD Letter

GOVERNING BOARD

John Lewandowski, President
Tom Carlson, Vice-President
Dan Post, Member
Suzanne Hopkins, Member
Maribel Lopez, Member

ADMINISTRATION

Doug Wilson, Ed.D., Superintendent
Carolyn Dumler, Ed.D., Assistant Superintendent
Kristin Reidy, Assistant Superintendent
Dan Contorno, Chief Financial Officer

MARANA
UNIFIED SCHOOL DISTRICT

5-16-16

Justine Currie
The WLB Group
4444 E. Broadway Blvd.
Tucson, AZ 85711

Dear Justine Currie:

In reference to your request for capacity evaluation of the proposed Twin Peaks and Decker residential development; the Marana Unified School District uses a factor of .25 per home for elementary and .1 per home secondary. Your anticipated 60 homes would have a positive impact of 15 elementary students and 6 secondary students.

With these homes in the Twin Peaks and Decker area De Grazia Elementary will serve the K to 6th grade students, Tortolita Middle School will serve the 7th and 8th grade students and Mountain View High School will serve the 9th to 12th grade students. All schools have capacity for the impact this completed development may have on our student population.

Thank you for your interest in developing homes and businesses in our community. The Town of Marana and Marana Unified School District mutually agree 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 development funds as they increase the number of properties being built in our community. The district uses these funds to ensure as we grow they are able to provide the necessary infrastructure to support the presentation of an inspiring education. Your 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 your participation.

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

Thank You,

Russell Federico, M.Ed.
Executive Director of Operational Support
Marana Unified School District
11249 W. Grier Rd. Suite 101
Marana, AZ 85653
520-682-4707
Fax 520-682-2514
r.a.federico@maranausd.org

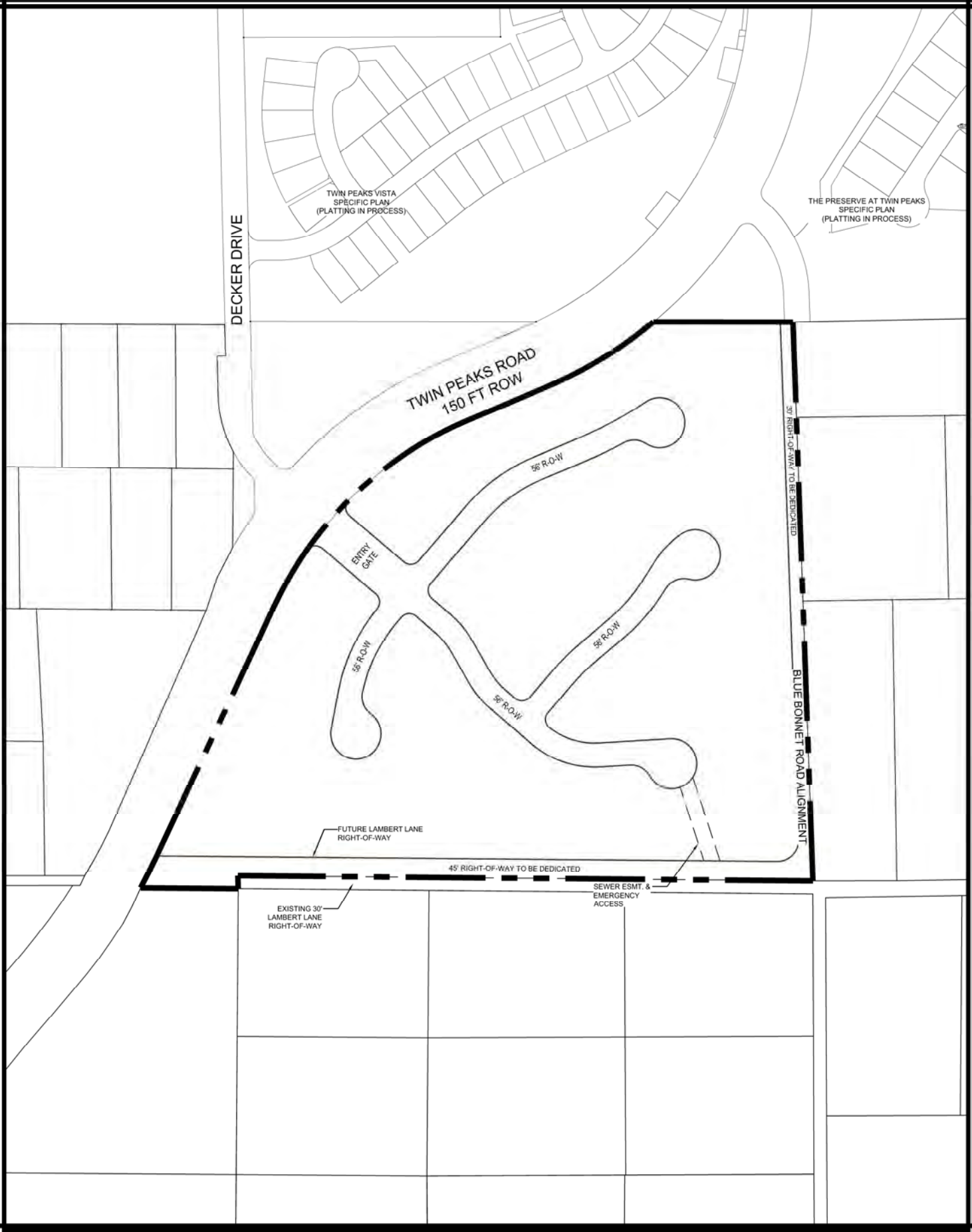
M. Recreation and Trails

Much of the development's open space will be owned and maintained by the HOA. The active space is a neighborhood park in the central portion of the property, providing easy access to all residents of this project through the internal sidewalk and trail network. This park is expected to be the recreation focal point of the neighborhood due to its central location within the project, as well as connectivity to the regional trail system. All plants shall be on an underground drip irrigation system. If turf is used, it must be irrigated from a secondary non-potable source as long as the non-potable source is available at the boundary of the project at the time that of development. These actions meet the recommendations in the Town of Marana's Parks, Recreation, Trails, and Open Space Master Plan and the Marana 2010 General Plan.

Along with the open space, there will also be a trail network located within and along the eastern and southern boundary of the project site. The trails within the project site will be private and the trails located along the eastern and southern boundaries will be public to allow access to the existing trails and shared-use paths in the area. See Exhibit: S

N. Cultural, Archaeological, and Historic Resources

Three historic period archaeological sites and six isolated occurrences of artifacts were recorded within the area of potential effects. All of these cultural resources are recommended as not eligible for inclusion on the Arizona and National Register of Historic Places. Accordingly, there are no historic properties affected in the project. No further treatment is recommended for the sites or isolates recorded in the project. See Exhibit N: Archaeological Survey Summary.



The WLB Group WLB

Exhibit V
Circulation Concept Plan

WLB No. 114013-C-001

0' 300'

Q:\114013\C001 - Twin Peaks 34\01 Planning\04 Rezone or GPA\Site Analysis\Exhibits\V - Circulation Concept Plan.dwg Plotted: Nov. 07, 2016

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IV. Bibliography

Cascada North Specific Plan. Presidio Engineering, Inc., 2011

Flood Insurance Rate Map Panel 1065 of 4750. Map. Washington DC: Federal Emergency Management Agency, 2011.

Pima County MapGuide. Map. Pima County Geographic Information Systems, 2016. http://gis.pima.gov/maps/mapguide/

Town of Marana Utilities Department. Camino de Manana 16" Public Z -Zone Watermain. Map. Marana: WestLand Resources, Inc., 2009.

Town of Marana 2010 General Plan. Town of Marana: 2010.

Twin Peaks Corridor Study. Town of Marana: 2014.

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V. Appendix A – Traffic Impact Statement

SOUTHWEST TRAFFIC ENGINEERING, LLC

16 August 2016

Fausto Burruel, PE
Traffic Division Manager
Town of Marana
11555 West Civic Center Drive
Marana, Arizona 85653

SUBJECT: TWIN PEAKS 34
DECKER DRIVE/TWIN PEAKS ROAD
REVISED TRAFFIC IMPACT STATEMENT

Dear Mr. Burruel,

Please find enclosed a brief revised traffic impact statement (TIS) regarding the proposed development of the Twin Peaks 34 residential project located on un-developed property along the east side of Twin Peaks Road at Decker Drive in Marana, Arizona. The site vicinity is located as shown in **Figure 1.** The project development will consist of fifty-eight (58) single family homes as shown in **Figure 2**. Access to the project site will be provided by one new access point, located on the east side of Twins Peaks Road at Decker Drive.

With the project expected to generate less than 100 trips during any one hour of the day a traffic impact analysis is not required for this development. However, the impact of the project on the adjacent street system will be addressed in this limited TIS.

Existing Conditions

Twin Peaks Road is currently a four-lane roadway which provides two lanes in each direction separated by a center raised median. The posted speed limit along Twin Peaks Road is 45 miles per hour (mph). Within the vicinity of the project, Twin Peaks Road generally has a north/south alignment and extends south from Tangerine Road, continuing approximately two miles past its interchange with Interstate 10 (I-10). North of Tangerine Road, Twin Peaks Road becomes Dove Mountain Boulevard. Near the project site, Twin Peaks Road has curb, gutter and bike lanes along both sides of the roadway. Sidewalk is present only on the east side of the roadway, while a paved multi-use path is provided along the west side of the road.

Providing one lane in each direction, Decker Drive exists as a paved roadway between Twin Peaks Road and Potvin Lane. There is currently no posted speed limit on the roadway. There are existing overhead utilities that parallel Decker Drive on the east side of the street north of Twin Peaks Road. Decker Drive provides a dirt shoulder with no curb, gutter, or sidewalk facilities in this area. Currently, Decker Drive is signed as having 'NO OUTLET' beginning

at Twin Peaks Road. The roadway extends to the north ending at Potvin Lane where traffic must turn to the west onto a graded unpaved roadway.

The intersection of Decker Drive/Twin Peaks Road is an un-signalized "T" intersection that is STOP sign controlled on the eastbound approach from Decker Drive, while the northbound and southbound approaches on Twin Peaks Road are free flow. Eastbound traffic on Decker Drive is provided with a single shared left turn/right turn lane. Northbound traffic on Twin Peaks Road is provided with an exclusive left turn lane and two through lanes while southbound vehicles are offered an exclusive U-turn only lane (future left turn lane), a single through lane and a shared through/right turn lane. A paved multi-use path crosses the west leg of the intersection where pedestrian ramps are provided however there are no striped crosswalks on any of the intersection approaches.

Proposed Access

Access to the Twin Peaks 34 project will be provided by a new access point, located along the east side of Twin Peaks Road. This proposed access point will serve as the new east leg of the existing intersection of Decker Drive/Twin Peaks Road.

The new westbound approach to the intersection of Decker Drive/Twin Peaks Road will provide a single shared left turn/through/right turn lane for westbound traffic exiting the site. Northbound and southbound traffic entering the project site from Twin Peaks Road will be offered an exclusive left turn lane, a single through lane and a shared through/right turn lane.

Trip Generation

Trip generation for the project was developed utilizing nationally agreed upon data contained in the Institute of Transportation Engineers (ITE) publication *Trip Generation, 9th Edition*, 2012. Trip generation was estimated for the construction of fifty-eight (58) single family homes based on ITE Land Use Code 210, Single-Family Detached Housing. The result of the weekday trip generation for the proposed project is shown below in **Table 1**. The complete trip generation calculations can be found attached to this TIS.

Table 1 – Weekday Site Generated Trips

Time Period	Single-Family Detached Housing
Average Daily, Inbound (vtpd)	277
Average Daily, Outbound (vtpd)	277
Total Daily	**554**
AM Peak Hour, Inbound (vtph)	11
AM Peak Hour, Outbound (vtph)	33
Total AM Peak	**44**
PM Peak Hour, Inbound (vtph)	37
PM Peak Hour, Outbound (vtph)	21
Total PM Peak	**58**

vtpd - vehicle trips per day, vtph - vehicle trips per hour

As shown in **Table 1**, the proposed Twin Peaks 34 project is projected to generate forty-four (44) additional vehicle trips during the weekday AM peak hour and fifty-eight (58) additional vehicle trips during the weekday PM peak hour. The limited number of total site generated trips is not expected to have any significant impact on the surrounding roadway network.

Trip Distribution and Assignment

Trip distribution for the project was based on direction from the Town of Marana. In order to form a basis for analysis of the project impacts, weekday AM and PM peak hour turning movement counts were conducted at the intersections of Decker Drive/Twin Peaks Road.

The weekday turning movement counts were conducted from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM in May 2016. The complete traffic count data can be found attached to this letter.

Figure 3, which is also attached to the end of this letter, shows the weekday trip distribution for the project as a percentage of net new primary trips and shows the assignment of the new site generated peak hour trips to the to the adjacent roadway system.

Turn Lane Analysis

A key element of this study is to determine if left and right turn lanes are required at the intersection that will directly serve the project site. The *Pima County Traffic Impact Studies/Traffic Memoranda Procedures* provides warrants for the inclusion of left and right turn lanes at un-signalized intersections based on speed limit, through traffic volume and turning traffic volume during the peak hour.

When needed, turn lanes remove the slowing turning traffic from the through traffic stream, improving capacity and reducing rear-end accidents. **Table 2** shows the location that was evaluated for turn lanes.

Table 2 – Turn Lane Warrants

Intersection	Direction	Turn Treatment Analyzed	Turn Treatments Warranted?
Decker Drive/Twin Peaks Road	Northbound	Right Turn Lane	Yes
Decker Drive/Twin Peaks Road	Southbound	Left Turn Lane	Yes

Based on the new site generated PM peak hour traffic volumes with the project, an auxiliary southbound left turn lane and northbound right turn lane are warranted to serve the project traffic at the intersection of Decker Drive/Twin Peaks Road.

Another key element of this turn lane analysis is to determine the storage length required for the warranted turn lanes.

The queue storage requirements for the area roadways were calculated using the following methods as recommended in *A Policy of Geometric Design of Highways and Streets* (AASHTO, 2011).

For un-signalized intersections, storage for vehicles likely to arrive in an average two-minute period within the peak hour should be provided.

Vehicles per 2 min. period = (vehicles/hour)÷(30 periods/hour)
Storage length = vehicles per 2 min. period x 25 feet

Table 3 shows the calculated queue lengths based on site generated PM peak hour traffic volumes with the project. The computed values are typically rounded up to the nearest 25 feet. Complete storage length calculations can be found in the Appendix.

Table 3 – Queue Storage

Intersection	Left Turn Storage				Right Turn Storage			
	NB	SB	EB	WB	NB	SB	EB	WB
Decker Drive/Twin Peaks Road								
Turning Volume (vph)		7			30			
$S_{calculated}$ =		6			25			
$S_{rounded}$ =		25			25			

S - storage in feet, vph - vehicles per hour

As presented in **Table 3,** the intersection of Decker Drive/Twin Peaks Road requires 25 feet of storage for the northbound right turn movement and for the southbound left turn movement into the project site. The existing 150' southbound left turn lane on Twin Peaks Road is expected to be able to accommodate the predicted vehicle queue length for the southbound left turning movements.

A minimum queue storage length of 25 feet is recommended for the new northbound right turn lane into the project site to adequately store the predicted queue length associated with the site generated traffic volumes.

Conclusion

As shown in **Table 1**, the proposed Twin Peaks 34 development is projected to generate forty-four (44) additional vehicle trips during the weekday AM peak hour and fifty-eight (58) additional vehicle trips during the weekday PM peak hour. This limited number of trips is not expected to have any significant impact on the surrounding roadway network.

A new southbound left turn lane is warranted to serve the project traffic at the intersection of Decker Drive/Twin Peaks Road based on the site generated PM peak hour traffic volumes with the project.

With approximately 150 feet of storage within the existing southbound left turn lane on Twin Peaks Road, there will be sufficient space to store the predicted queues associated with the southbound left turning movements into the project site.

While a northbound right turn lane is warranted into the project site, the nature of the roadway does not lend itself to right turn lanes. Moreover, such short turn lanes do not provide the desired effect of removing turning vehicles from mainstream traffic. The intersection of Decker Drive/Twin Peaks Road is expected to operate at an adequate LOS without the northbound right turn lane.

It is also recommended that STOP sign control for the westbound approach to the intersection of Decker Drive/Twin Peaks Road be installed as part of the project site construction.

Thank you again for your time and review of this TIS. If you have any questions regarding the TIS, please feel free to contact me at 602.266.7983.

Respectfully Submitted,



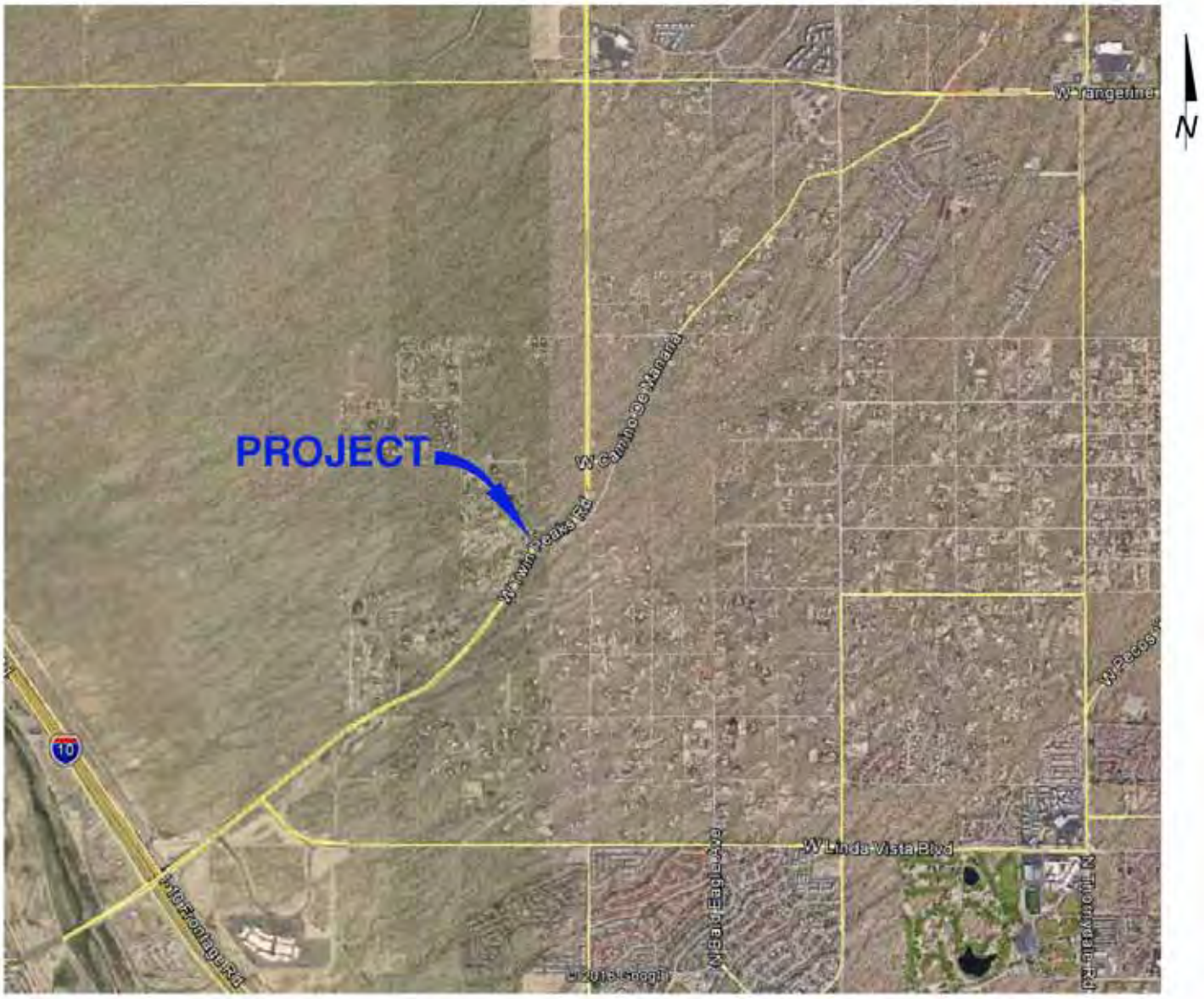
Expires 3-31-19

Andrew Smigielski, PE, PTOE
Southwest Traffic Engineering LLC
Senior Traffic Engineer

cc: James Gaulin, Meritage Homes (by email)
Paul Oland, The WLB Group (by email)

Attachments: Figure 1 - Vicinity May
Figure 2 - Site Plan
Trip Generation Calculations
Traffic Counts
Figure 3 - Distribution/Assignment
Turn Lane Calculations
Town of Marana TIS Submittal Form
Comment Resolution Form

Figure 1 – Vicinity Map



Single-Family Detached Housing

LAND USE: 58 Dwelling Units Single-Family Detached Housing

TRIP GENERATION CALCULATIONS ARE BASED ON THE INSTITUTE OF TRANSPORTATION ENGINEERS' TRIP GENERATION, 9TH EDITION. THE ITE LAND USE CODE IS Single-Family Detached Housing (210)

WEEKDAY

Rate = 9.52 Trips per Dwelling Unit (DU)
T = 9.52 Trips x 58 DU
T = 554 VPD
ENTER: (0.5)*(554) = **277 VPD**
EXIT: (0.5)*(554) = **277 VPD**

AM PEAK HOUR (ONE HOUR BETWEEN 7 AND 9 AM)

Rate = 0.75 Trips per Dwelling Unit (DU)
T = 0.75 Trips x 58 DU
T = 44 VPH
ENTER: (0.25)*(44) = **11 VPH**
EXIT: (0.75)*(44) = **33 VPH**

PM PEAK HOUR (ONE HOUR BETWEEN 4 AND 6 PM)

Rate = 1 Trips per Dwelling Unit (DU)
T = 1 Trips x 58 DU
T = 58 VPH
ENTER: (0.63)*(58) = **37 VPH**
EXIT: (0.37)*(58) = **21 VPH**

*where, T = trip ends

TRIP GENERATION SUMMARY

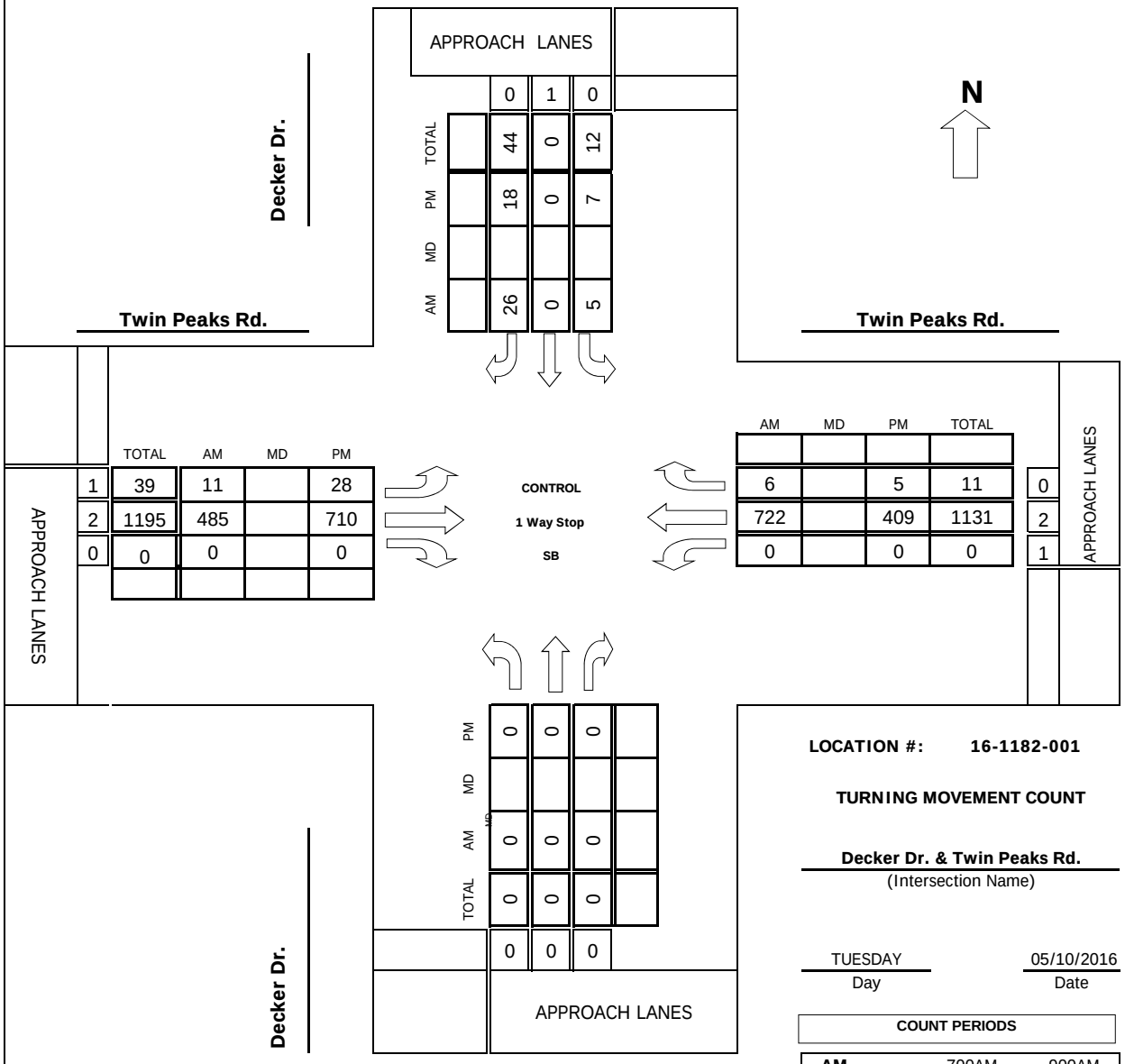
WEEKDAY	**554 VPD**
AM PEAK HOUR (ONE HOUR BETWEEN 7 AND 9 AM)	**44 VPH**
PM PEAK HOUR (ONE HOUR BETWEEN 4 AND 6 PM)	**58 VPH**

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 16-1182-001

TMC SUMMARY OF Decker Dr. & Twin Peaks Rd.



LOCATION #: 16-1182-001

TURNING MOVEMENT COUNT

Decker Dr. & Twin Peaks Rd.
(Intersection Name)

TUESDAY (Day) 05/10/2016 (Date)

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 715 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

Intersection Turning Movement

Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Decker Dr.	DATE:	05/10/2016	LOCATION:	Marana
E-W STREET:	Twin Peaks Rd.	DAY:	TUESDAY	PROJECT#	16-1182-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	1	2	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	0	0	3	0	10	1	113	0	0	179	0	306
7:15 AM	0	0	0	2	0	7	1	139	0	0	213	1	363
7:30 AM	0	0	0	3	0	7	5	111	0	0	173	2	301
7:45 AM	0	0	0	0	0	10	3	102	0	0	163	2	280
8:00 AM	0	0	0	0	0	2	2	133	0	0	173	1	311
8:15 AM	0	0	0	1	0	3	1	108	0	0	114	1	228
8:30 AM	0	0	0	2	0	6	4	90	0	0	98	0	200
8:45 AM	0	0	0	1	0	3	1	80	0	0	97	0	182
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	0	12	0	48	18	876	0	0	1210	7	2171
Approach %	####	####	####	20.00	0.00	80.00	2.01	97.99	0.00	0.00	99.42	0.58	
App/Depart	0	/	25	60	/	0	894	/	888	1217	/	1258	

AM Peak Hr Begins at: 715 AM

PEAK													
Volumes	0	0	0	5	0	26	11	485	0	0	722	6	1255
Approach %	####	####	####	16.13	0.00	83.87	2.22	97.78	0.00	0.00	99.18	0.82	

PEAK HR. FACTOR:	0.000	0.775	0.886	0.850	0.864

CONTROL: 1 Way Stop (SB)
COMMENT 1:
GPS: 32.398012, -111.084168

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Decker Dr.	DATE:	05/10/2016	LOCATION:	Marana
E-W STREET:	Twin Peaks Rd.	DAY:	TUESDAY	PROJECT#	16-1182-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	1	2	0	1	2	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	0	0	0	0	4	10	154	0	0	103	2	273
4:15 PM	0	0	0	0	0	3	0	157	0	0	92	2	254
4:30 PM	0	0	0	3	0	7	4	148	0	0	109	0	271
4:45 PM	0	0	0	4	0	7	9	166	0	0	73	1	260
5:00 PM	0	0	0	0	0	2	5	172	0	0	109	3	291
5:15 PM	0	0	0	1	0	3	6	169	0	0	117	1	297
5:30 PM	0	0	0	2	0	6	8	203	0	0	110	0	329
5:45 PM	0	0	0	0	0	1	2	116	0	0	64	2	185
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

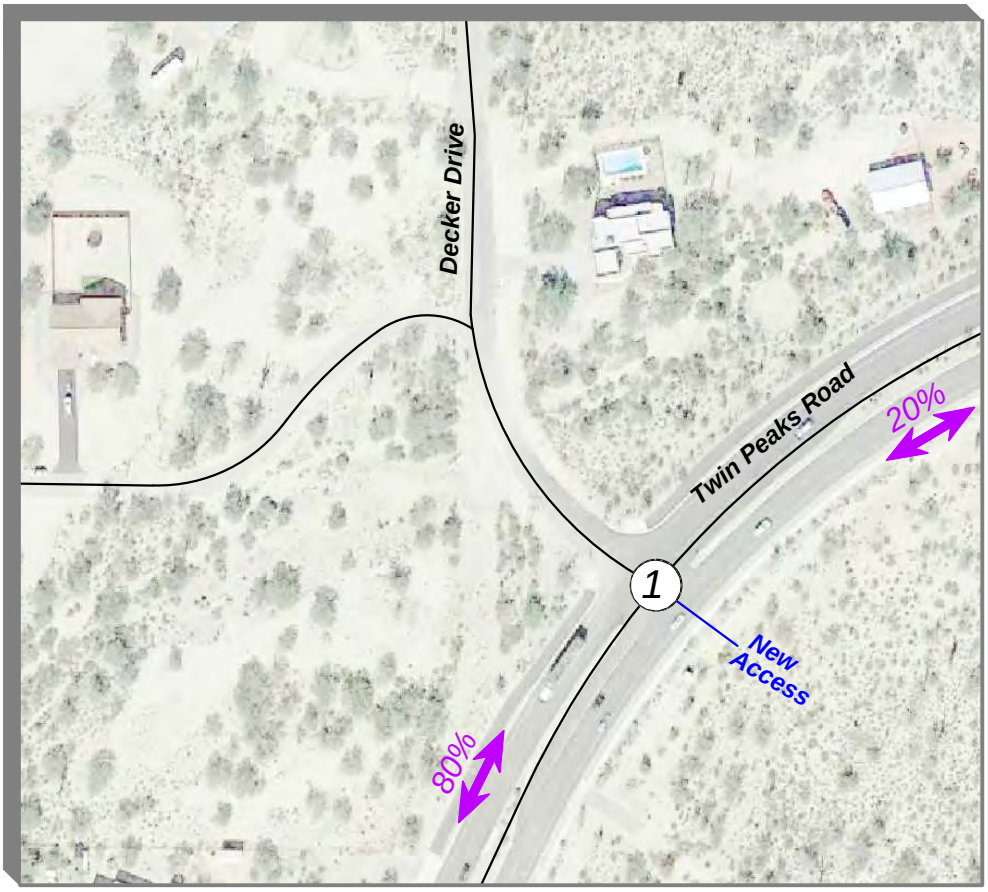
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	0	0	0	10	0	33	44	1285	0	0	777	11	2160
Approach %	####	####	####	23.26	0.00	76.74	3.31	96.69	0.00	0.00	98.60	1.40	
App/Depart	0	/	55	43	/	0	1329	/	1295	788	/	810	

PM Peak Hr Begins at: 445 PM

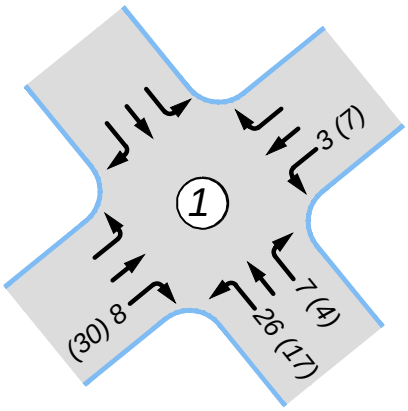
PEAK													
Volumes	0	0	0	7	0	18	28	710	0	0	409	5	1177
Approach %	####	####	####	28.00	0.00	72.00	3.79	96.21	0.00	0.00	98.79	1.21	

PEAK HR. FACTOR:	0.000	0.568	0.874	0.877	0.894

CONTROL: 1 Way Stop (SB)
COMMENT 1: 0
GPS: 32.398012, -111.084168







LEGEND:

XX = Weekday AM Peak Hour
(XX) = Weekday PM Peak Hour
Vehicle Trips Per Hour

——— *EXISTING ROAD*

——— *NEW ACCESS*

Figure 3: Distribution/Assignment

SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

Un-Signalized Intersection (Left Turn Lane)
Location: Decker Drive/Twin Peaks Road
Approach/Leg: Southbound

V = vehicles per hour

PM Peak Hour
V = 7 vph

S = Storage = (V *2 min* 25 ft/veh)/60 min/hr

$$S\,(ft) = \frac{7\ vph*(2\ min)*(25\ ft/veh)}{(60\ min/hr)} = 6\ feet$$

Minimum Recommended Storage: 25 feet

Un-Signalized Intersection (Right Turn Lane)
Location: Decker Drive/Twin Peaks Road
Approach/Leg: Northbound

V = vehicles per hour

PM Peak Hour
V = 30 vph

S = Storage = (V *2 min* 25 ft/veh)/60 min/hr

$$S\,(ft) = \frac{30\ vph*(2\ min)*(25\ ft/veh)}{(60\ min/hr)} = 25\ feet$$

Minimum Recommended Storage: 25 feet

7-5-2006

TOWN OF MARANA ARIZONA
TRANSPORTATION IMPACT STUDY
CHECKLIST AND SUBMITTAL FORM

Please complete this form and return to Marana Development Services, Traffic Engineering Division, for review and acceptance. Submit the completed and accepted form with your study. Studies will not be reviewed without this checklist attached. (Acceptance of this form does not constitute acceptance of the study.)

Project Name: Twin Peaks 34

Project Location: Decker Drive/Twin Peaks Road

Applicant/Developer Briana Rader, Meritage Homes, 3275 W. Ina Rd. #220, Tucson, AZ

Consultant: Southwest Traffic Engineering LLC

Address 3838 N. Central Ave. #1810 **Phone** (602)-266-7983

City/Town Phoenix

State Arizona **E-mail** smig@swte.us

Arizona Civil Engineering Registrant? Yes

Was the consultant actively involved in the site circulation, roadway layout, and selection of access locations?

Brief description of project:

This project proposes to construct 60 single family homes on approximately 33.4 acres of land.

Current and proposed zoning:

Current Zoning - R-144 Single-Family Residential, Proposed zoning - R-6 Single-Family Residential

☒ **Pre-submittal Meeting Held on** 17 March 2016

Summary of Meeting:

A traffic statement will be required, including analysis of warrant for deceleration lane. Provide 10'-15' public trail easement through open space. Marana Water campus completion date is unknown, facility will need to be completed to provide water to this project. Lambert Lane will need a 75' half right-of-way dedication. A new access apron on Twin Peaks will need to be provided at the new Lambert Lane tie-in. Lambert Lane should be constructed perpendicular to Twin Peaks Road. The site requires 70% open space, however rezoning of the property would reduce requirement to 30%.

Nature of Transportation Study

Rezoning study?	☒ Yes	☐ No
Development Plan?	☐ Yes	☐ No
Block Plat?	☐ Yes	☐ No
Subdivision Plat?	☐ Yes	☐ No

Proposed access locations:

A new access will be provided to Twin Peaks Road at Decker Drive as the new east leg of the intersection.

New Median Openings requested?	☐ Yes	☒ No
Access via Non-Town Roadways?	☐ Yes	☒ No
Coordination with Non-Town Agency(s)?	☐ Yes	☒ No

Transportation Study Parameters

Trip Generation Horizon Year(s)

Land Use Categories and Rates:
ITE Land Use Code 210 - Single Family Detached Housing

Trip Distribution

To/From **North:** 52% **East:**
South: 48% **West:**
Other:

Passer-by Traffic & Internal Capture

Rate(s) None assumed.

Alternate Modes Considerations

Bike
Pedestrian
Transit

Traffic Data and Preliminary Trip Generation

Trip Generation: Daily - 572 vehicle trips per day,
AM Peak Hour - 45 trips, PM Peak Hour - 60 trips.

Analysis Elements and Methods

Roadways

Intersections

Traffic Safety and other Special Considerations

Turning movements will be presented but no LOS analysis will be completed in the Traffic Impact Statement.

We concur that the information above is correct and that the study will include the parameters and elements described above.

Consultant Concurrence in Study Requirements **Consultant signature:**

Printed name: Andrew Smigielski

Title: Principal of Firm **Date:** 17 May 2016

***Checklist Accepted** **Town of Marana authorized signature:**

Printed name: Fausto Burruel

Title: Traffic Division Manager **Date:** 5/17/2016

MARANA USE ONLY:

** As there may be instances when one or more study requirements are inadvertently not discussed during the pre-submittal meeting, additional study parameters or elements (other than those discussed in this Checklist) may be required following the first submittal of the study if the Town deems that they are critical to the study findings.*

SOUTHWEST TRAFFIC ENGINEERING, LLC

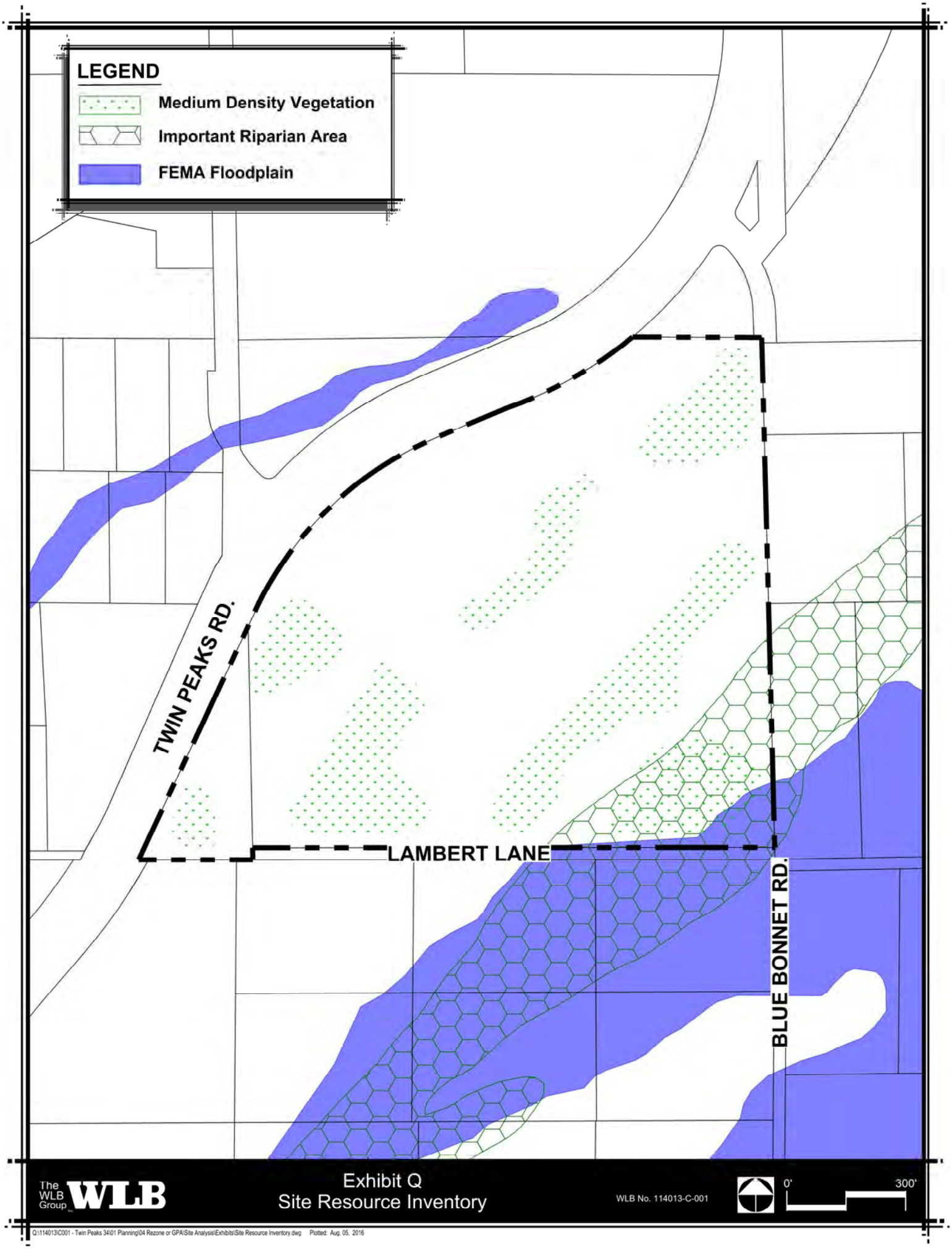
Twin Peaks
TIS dated 23 May 2016
Comment Resolution

6/26/2016

Item No.	Page No.	Reviewer	Code	Comment	Response
				Town of Marana	
1	General	Fausto Burruel	A	The proposed trip distribution showing 56% north and 48% does not reflect the anticipated trip distribution from the development. An accepted traffic study located approximately ¾ miles south of your development indicates a distribution of 15% north, 80% south, and 5% eastbound. The Twin Peaks 34 distribution should be approximately an 85/15 or 80/20 split with the majority of the traffic being southbound.	The trip generation in the traffic impact statement (TIS) has been updated.
2	General	Fausto Burruel	A	The turn lane analysis should be re-evaluated based on the new trip distribution.	Analysis has been updated. See revised TIS.

A - Will Revise
B - Consultant to Evaluate
C - Marana to Evaluate
D - See Response

VI. Appendix B – Site Resource Inventory



The WLB Group WLB

Exhibit Q
Site Resource Inventory

WLB No. 114013-C-001

0' 300'

Q:\114013\C001 - Twin Peaks 3401 Planning\04 Rezone or GPA\Site Analysis\Exhibits\Site Resource Inventory.dwg Plotted: Aug. 05, 2016

Tierra Right of Way
A LAND SERVICES COMPANY

METRO WATER DISTRICT

March 15, 2017

DELIVERY VIA EMAIL AND CERTIFIED MAIL WITH RETURN RECEIPT REQUESTED
Certified Mail Receipt No. 7016 0340 0000 2270 3731

Town of Marana
Planning Department
ATTN: Brian D. Varney, Senior Planner
11555 W. Civic Center Dr., Bldg. A2
Marana, AZ 85653

RE: Metropolitan Domestic Water Improvement District
Project: Metro Water Easement Acquisition
Property Location: 5600 W. Camino De Manana, Marana, AZ 85742
TRW File Number: 15T0-017-03
Tax parcel: 216-23-072B and 073D
Subject: Public Water Easement – Request to Add as Condition of Rezoning

Mr. Varney:

On behalf of Metropolitan Domestic Water Improvement District (Metro Water), and in conjunction with the Town of Marana and Oro Valley, Metro Water plans to improve its water facilities as part of an overall plan to improve water distribution in this area.

Metro Water is formally requesting for the Town of Marana to place the Metro Water plan to install a 30-foot-wide perpetual Easement across private property, APN 216-23-072B and 073D, on the rezoning meeting agenda for March 29th. We ask that the waterline easement be a condition of rezoning and plat for the subject property and for the Planning Commission and Town of Marana to approve and incorporate the following description in the final approved subdivision plat:

"Metro Water District Northwest Recharge & Recovery Project, in conjunction with the Town of Marana and Oro Valley, Metro Water District, its successors and assigns, a perpetual right- of-way privilege and easement for ingress and egress, and for any water pipe or mains now laid or which hereafter may be laid, together with right of ingress and egress, including but not limited to the right of attaching thereto meters, fire hydrants, valves, regulators, services and all other items necessary in the construction and maintenance thereof and the right to enter into and upon for the purpose of removing the same at the sole discretion of the Metropolitan Domestic Water Improvement District, a

Randye K. Ferrick, President & Broker
1575 East River Road, Suite 201 • Tucson, Arizona 85718 • 520.319.2106 • Fax: 520.323.3326
Right of Way • Cultural Resources • Environmental Planning
Federal, State, and Local Permitting • GIS & Mapping
www.tierra-row.com

perpetual 30 foot wide water line easement over, under, across, and through Private property, APN 216-23-072B, 073D, and more particularly described between the West boundary line bordering Twin Peak Road and the East boundary line boarding N. Bluebonnet Road, and lying along the south boundary line and adjacent to the future north boundary line of Lambert Lane Road. In additions, a 20-foot-wide Temporary Construction Easement, adjacent to and long the north boundary of the 30-foot Water Line Easement. "

I will be available to assist you and to address any comments or concerns you may have regarding request and or language. Please feel free to call me at (520) 319-2106. You may also reach me at my email: slane@tierra-row.com.

Sincerely,

Susan D. Lane, Acquisition Agent
Tierra Right of Way Services, Ltd.
Acting Agent for Metropolitan Domestic Water Improvement District