

SISTERS OF THE IMMACULATE HEART OF MARY

CONTINUING CARE RETIREMENT COMMUNITY SPECIFIC PLAN

SABINO CANYON ROAD, NORTH OF RIVER
PIMA COUNTY, ARIZONA



Sisters of the Immaculate Heart of Mary

Continuing Care Retirement Community Specific Plan

3820 N. Sabino Canyon Road
Tucson, Arizona 85750-6320

Submitted to:

**Pima County
Planning Division
Development Services Department**
201 North Stone Avenue, Second Floor
Tucson, Arizona 85701

Prepared for:

Sisters of the Immaculate Heart of Mary
35 East Fifteenth Street
Tucson, Arizona 85701

Prepared by:

The Planning Center
110 South Church Avenue, Suite 6320
Tucson, Arizona 85701
Telephone: (520) 623-6146

With assistance from:

Tucson Land & Cattle Co.
P.O. Box 14890
Tucson, AZ 85732
Telephone: (520) 237-4404

Watermark Retirement Communities Inc.
2020 West Rudasill Road
Tucson, AZ 85704
Telephone: (520) 797-4000

Rick Engineering Company
3945 East Fort Lowell Road, Suite 111
Tucson, Arizona 85712
Telephone: (520) 745-1000

And:

Mathieu Engineering, Corp.
5960 East Second Street
Tucson, Arizona 85711
Telephone: (520) 747-1133



January 2015

| | |
|---|-----------|
| Introduction | 1 |
| Site Inventory | 2 |
| A. Existing Land Uses | 3 |
| 1. Location and Regional Context | 3 |
| 2. Existing On-Site Land Uses | 3 |
| 3. Existing Off-Site Land Uses | 8 |
| B. Topography and Grading | 12 |
| 1. Topographic Characteristics of the Site | 12 |
| 2. Pre-development Average Cross Slope Calculations | 13 |
| C. Hydrology | 15 |
| 1. Off-Site Watersheds | 15 |
| 2. Off-Site Natural or Man-Made Features | 15 |
| 3. Upstream Off-Site Watersheds with 100-Year Discharges Greater than 100 cfs | 15 |
| 4. On-Site Hydrology | 17 |
| 5. Existing Drainage Conditions along the Downstream Property Boundary | 20 |
| D. Biological Resources | 20 |
| 1. Conservation Lands System and Critical Landscape Connections | 20 |
| 2. Pima Pineapple Cactus | 20 |
| 3. Priority Conservation Areas | 20 |
| 4. Special Elements | 22 |
| 5. Special Status Species | 26 |
| 6. Ironwoods and Saguaros | 28 |
| 7. Habitat Protection/Community Open Space Priority Acquisition | 28 |
| 8. Important Vegetation | 28 |
| E. Soils | 31 |
| 1. On-Site Soils Testing | 31 |
| 2. Soil Suitability for Septic Use | 31 |
| F. Viewsheds | 32 |
| 1. Looking Onto and Across the Site from Areas Around the Site | 32 |
| G. Transportation | 36 |
| 1. Existing and Proposed Off-Site Streets | 36 |
| H. Sewers | 39 |
| 1. Capacity Response Letter | 39 |
| 2. Locations of Existing Public Sewers | 39 |
| I. Schools | 42 |
| J. Recreation and Trails | 42 |
| 1. Parks, Recreation Areas, Public Trails | 42 |
| 2. Proposed Trail Rights-of-Way | 42 |
| K. Cultural Resources: Archaeological and Historic Sites | 44 |
| 1. Arizona State Museum Letter | 44 |
| 2. Field Survey Results | 44 |
| L. Air Quality | 46 |
| M. Composite Map | 46 |
| Land Use Proposal | 48 |
| A. Project Overview | 49 |
| B. Objectives of the Specific Plan | 50 |
| 1. Requested Zoning Boundaries | 51 |
| 2. Characteristics of the Proposed Development | 51 |
| C. Land Use Proposal | 55 |
| D. Topography and Grading | 59 |



| | | |
|-----------|--|-----------|
| 1. | Development on Slopes 15% or Greater..... | 59 |
| 2. | Hillside Development Zone | 59 |
| 3. | Area to be Disturbed..... | 59 |
| 4. | Change in Natural Grade of more than 5 feet | 60 |
| 5. | Engineering and Design Features..... | 60 |
| E. | Hydrology | 63 |
| 1. | Hydrologic Characteristics of PDP | 63 |
| 2. | Encroachment Mitigation | 63 |
| 3. | Post-Development Discharges | 63 |
| 4. | Potential Drainage Impacts to Offsite Locations..... | 64 |
| 5. | Engineering and Design Features..... | 64 |
| 6. | Conformance with Applicable Plans..... | 64 |
| F. | Biological Resources | 66 |
| 1. | CLS Designations | 66 |
| 2. | Saguaros | 66 |
| 3. | Ironwood Trees..... | 66 |
| 4. | Pima Pineapple Cactus | 66 |
| 5. | Significant or Important Vegetation | 66 |
| G. | Landscape and Buffer Plan | 67 |
| H. | Viewsheds..... | 68 |
| I. | Circulation | 69 |
| 1. | Access Points..... | 69 |
| 2. | Future Road Improvements | 69 |
| 3. | Changes to ADT and LOS | 69 |
| 4. | Traffic Impacts..... | 71 |
| 5. | Bicycle and Pedestrian Pathways | 72 |
| 6. | On-Site Access..... | 72 |
| 7. | Transportation Concurrency | 72 |
| 8. | Traffic Impact Study (TIS) Requirement..... | 73 |
| 9. | Reduction in Automobile Dependency | 73 |
| J. | Sewers..... | 73 |
| K. | Water | 73 |
| L. | Schools | 73 |
| M. | Recreation and Trails | 73 |
| 1. | Recreation Areas to be Provided | 73 |
| 2. | Proposed Ownership of Open Space..... | 74 |
| 3. | Proposed Trails | 74 |
| N. | Cultural Resources: Archaeological and Historic Sites | 74 |
| O. | Air Quality | 74 |
| P. | Other..... | 74 |
| 1. | Guiding Principles..... | 74 |
| Q. | Agreements with Neighboring Properties | 75 |
| | Development Regulations | 76 |
| A. | Purpose and Intent..... | 77 |
| B. | Applicability | 77 |
| C. | Native Plant Preservation Ordinance (NPPO)..... | 77 |
| D. | Permitted Land Uses..... | 77 |
| 1. | Continuing Care Retirement Community (CCRC): | 77 |
| 2. | Open Space (OS): | 78 |
| E. | Development Standards..... | 79 |



| | |
|---|------------|
| 1. General Development Standards | 79 |
| 2. Detached and Attached/Institutional Residential | 79 |
| 3. Non-residential | 79 |
| 4. Parking | 80 |
| F. Design Guidelines | 80 |
| G. Definitions..... | 84 |
| Implementation and Administration | 86 |
| A. Purpose..... | 87 |
| B. General Implementation Responsibilities..... | 87 |
| C. Development Review Procedure | 87 |
| D. Phasing | 88 |
| E. Specific Plan Administration | 90 |
| 1. Enforcement..... | 90 |
| 2. Administrative Change..... | 90 |
| 3. Substantial Change | 91 |
| 4. Interpretation | 91 |
| Appendices | 92 |
| Appendix A: Preliminary Integrated Water Management Plan | 93 |
| 1. Water Context..... | 93 |
| 2. Onsite Existing and Historic Water Use | 93 |
| 3. Onsite Proposed Water Use | 93 |
| 4. Water Supply and Delivery | 93 |
| 5. Water Demand Projections | 93 |
| 6. Proximity to Renewable and Potable Water Supplies | 94 |
| Appendix B: Legal Description | 100 |
| Bibliography | 103 |



Exhibits

| | |
|--|----|
| Exhibit I.A.1: Location and Vicinity | 6 |
| Exhibit I.A.3.a.1: Existing Zoning | 9 |
| Exhibit I.B: Topography | 14 |
| Exhibit I.C.1: Off-Site Watersheds | 16 |
| Exhibit I.C.4.a: On-Site Hydrology | 18 |
| Exhibit I.C.4.b: FIRM Map | 19 |
| Exhibit I.D.1: Conservation Lands System | 21 |
| Exhibit I.D.4.a: Vegetation | 24 |
| Exhibit I.D.4.b: Riparian Habitat Inventory | 25 |
| Exhibit I.D.5: Arizona Game and Fish Department Online Reference | 27 |
| Exhibit I.D.9.a: Key Map for Riparian Area Photos | 29 |
| Exhibit I.D.9.b: Riparian Area Photos | 30 |
| Exhibit I.F.1: Photo Key Map | 33 |
| Exhibit I.F.2: Site Photos | 34 |
| Exhibit I.G: Traffic | 38 |
| Exhibit I.H.1: Wastewater Letter | 40 |
| Exhibit I.H.2: Sewer System Map | 41 |
| Exhibit I.I.1: Schools, Recreation and Trails | 43 |
| Exhibit I.K: Arizona State Museum Letter | 45 |
| Exhibit I.M: Composite Map | 47 |
| Exhibit II.C.1: Specific Plan Map | 57 |
| Exhibit II.C.2: Conceptual Site Plan | 58 |
| Exhibit II.D.3: Grading Concept | 61 |
| Exhibit II.D.4: Greater than 5 Feet Grade Change | 62 |
| Exhibit II.D: Post-Development Hydrology | 65 |
| Exhibit IV.D.1: Phasing Concept | 89 |
| Exhibit A.1: Water Context Map | 95 |
| Exhibit A.2: Local Context Map | 96 |
| Exhibit A.3: Metro Water District Letter | 97 |
| Exhibit A.5.a.1: Water Demand Estimates | 98 |
| Exhibit A.5.a.2: Metro Water Correspondence | 99 |

Tables

| | |
|---|----|
| Table I.A.2: Building Inventory | 3 |
| Table 1.A.3.a: Existing Zoning & Comprehensive Plan Designation | 8 |
| Table 1.A.3.b: Existing Off-Site Land Uses | 8 |
| Table 1.A.3.c: Number of Stories | 8 |
| Table I.D.6: Native Plant Inventory Summary | 28 |
| Table I.G.1.a: Right-of-Way | 36 |
| Table I.G.1.b: Roadway Characteristics | 36 |
| Table I.G.1.c: Average Daily Traffic | 37 |
| Table I.G.1.d: Roadway Improvements | 37 |
| Table I.I: School Characteristics | 42 |
| Table I.J: Trail Classifications | 42 |
| Table II.I.3: Site Traffic Generation | 69 |



Introduction

The Sisters of Immaculate Heart of Mary Continuing Care Retirement Community Specific Plan (CCRC Specific Plan) is comprised of approximately 63 acres located along Sabino Canyon Road, southeast of the Sabino Canyon Road/Kolb Road intersection in Pima County, Arizona. This property is part of the Catalina Foothills Subregion of the Pima County Comprehensive Plan and is designated Low-Intensity Urban-0.5 (LIU-0.5) and Medium Intensity Urban (MIU) pursuant to a Comprehensive Plan Amendment (Co7-08-03) approved by the Pima County Board of Supervisors on November 18, 2008. The site is currently zoned Suburban Ranch (SR). The CCRC Specific Plan proposes a mix of up to 500 dwelling units/beds. The conceptual development plan and specific plan reflect 477 units/beds with an allowance of up to 500 units/beds to maintain flexibility in the overall design and configuration of living units within the CCRC. The CCRC includes the Lodge, Memory Care, Age-Restrictive Apartments and Casitas and is based on all the property including the land to be dedicated to open space use but whose ownership is still by the Developer.

The CCRC Specific Plan is divided into four main sections. The first section, Site Inventory, presents the results of a thorough analysis of the opportunities and constraints of the site that determine its development capability. These items include zoning, surrounding land uses, topography, visibility, vegetation, wildlife and cultural resources. At the end of the section, the composite map is presented as a visual compilation of the above listed constraints and will serve as the basis for which the development of the land will be planned.

The vision for the project and its response to the constraints presented in the Site Inventory is articulated in the second section entitled Land Use Proposal. In this section, a plan for mitigating each constraint is developed to ensure that the new development, a continuing care retirement community (CCRC), is sensitive to the environment and its neighbors.

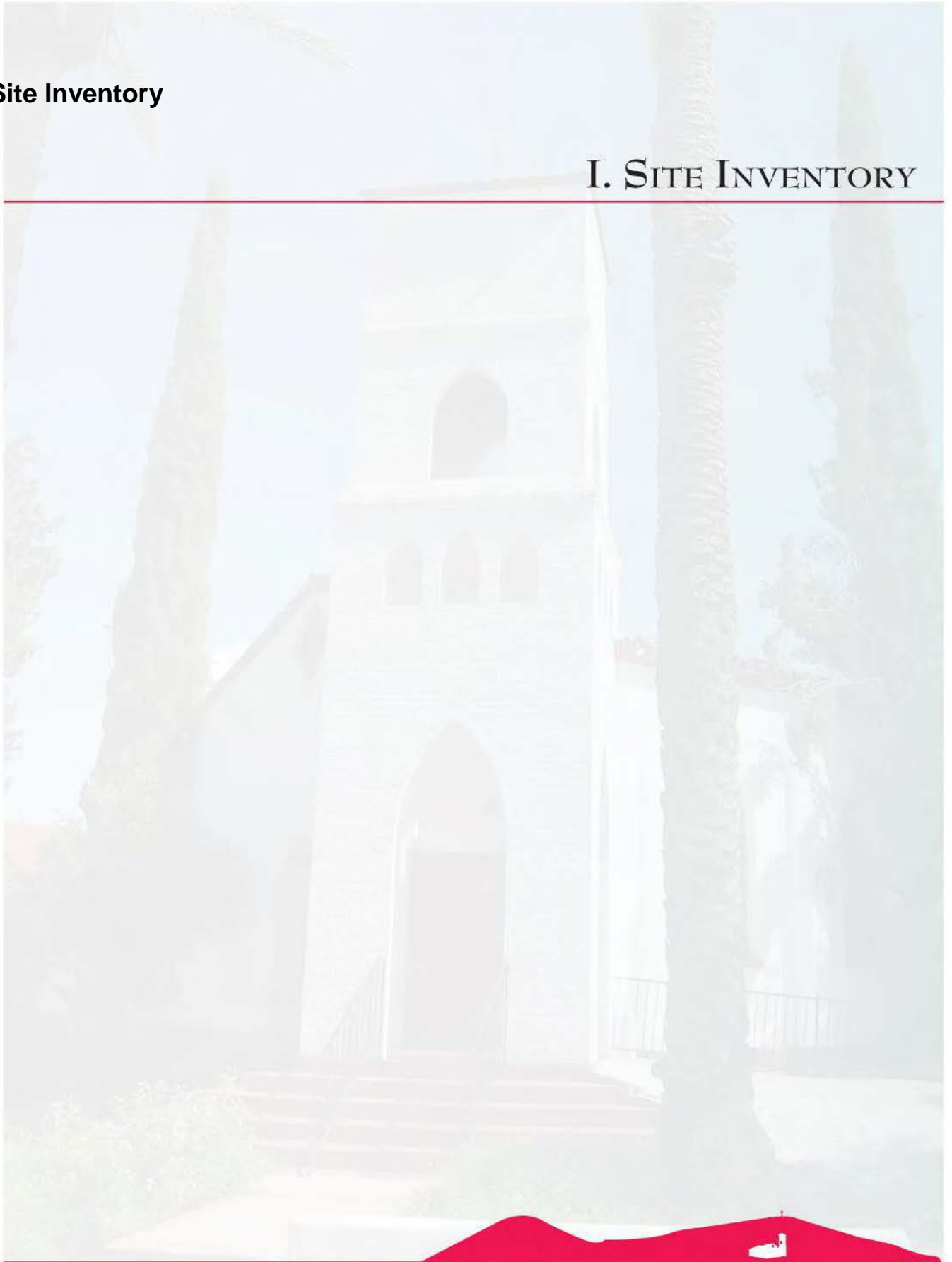
The third section, Development Regulations, details the set of standards new development within the Specific Plan must meet. These standards include provisions for allowable uses, development design criteria, native plant protection, open space, parking, landscaping and screening. Additionally, this section will discuss what uses are permitted within the Specific Plan and where they are allowed to be placed within its boundaries.

The last section, Implementation and Administration, provides a framework that will govern the execution of the policies set forth in the Land Use Proposal and Development Regulations. This is done to ensure that development occurs in a logical, timely, and sensitive manner.



Site Inventory

I. SITE INVENTORY



A. Existing Land Uses

1. Location and Regional Context

The subject parcel is located along the east side of Sabino Canyon Road, south of the Sabino Canyon/Kolb Road intersection within Township 13 South, Range 15 East, Section 29 in unincorporated Pima County, as shown in *Exhibit I.A.1: Location and Vicinity*. The site is comprised of a single parcel identified by the Pima County Assessor as 114-30-002C.

2. Existing On-Site Land Uses

a. Existing On-Site Land Uses

The site is primarily vacant. A convent, chapel, novitiate and a retirement home—all owned and operated by the Sisters of the Immaculate Heart of Mary—are located in the south central corner of the property, as shown in *Exhibit I.A.2: Existing On-Site Land Uses*.

Table I.A.2: Building Inventory

| Existing Building | Current Square Footage | Building Height (stories) | Building Setback from Closest Existing Property Line (feet) |
|---|------------------------|---------------------------|---|
| Building A: convent & chapel | 7,980 | 1 | 375' (perpendicular) from western property line |
| Building B: convent & offices | 3,140 | 1 | 280' (perpendicular) from southern property line |
| Building C: novitiate & meeting hall | 3,696 | 1 | 122' (perpendicular) from southern property line |
| Building D: garage | 1,799 | 1 | 240' (perpendicular) from southern property line |



b. Easements Existing On-Site

There are various easements located within a portion of the proposed bufferyards. These easements are noted on the Composite Map (Exhibit I.M) and include:

- Two 10-foot wide power easements and one 3-foot wide communications easement running perpendicular through a portion of the western boundary bufferyard adjacent to Sabino Canyon Road.
- A 30-foot wide slope and drainage easement running parallel with Sabino Canyon Road along the western boundary bufferyard.
- A drainage and slope easement at the western end of the Tucson Water Access Road running perpendicular to the western boundary bufferyard.
- 11-foot electric easement and ROW easement along south boundary perpendicular to N. Sabino Canyon Road.

c. Comprehensive Plan Designations & Rezoning Policies On-Site

As a result of comprehensive plan amendment Co7-08-03, there are two comprehensive plan designations on-site, 43 acres of MIU and 20 acres of LIU-0.5.

Rezoning policy RP-114 stipulates the following:

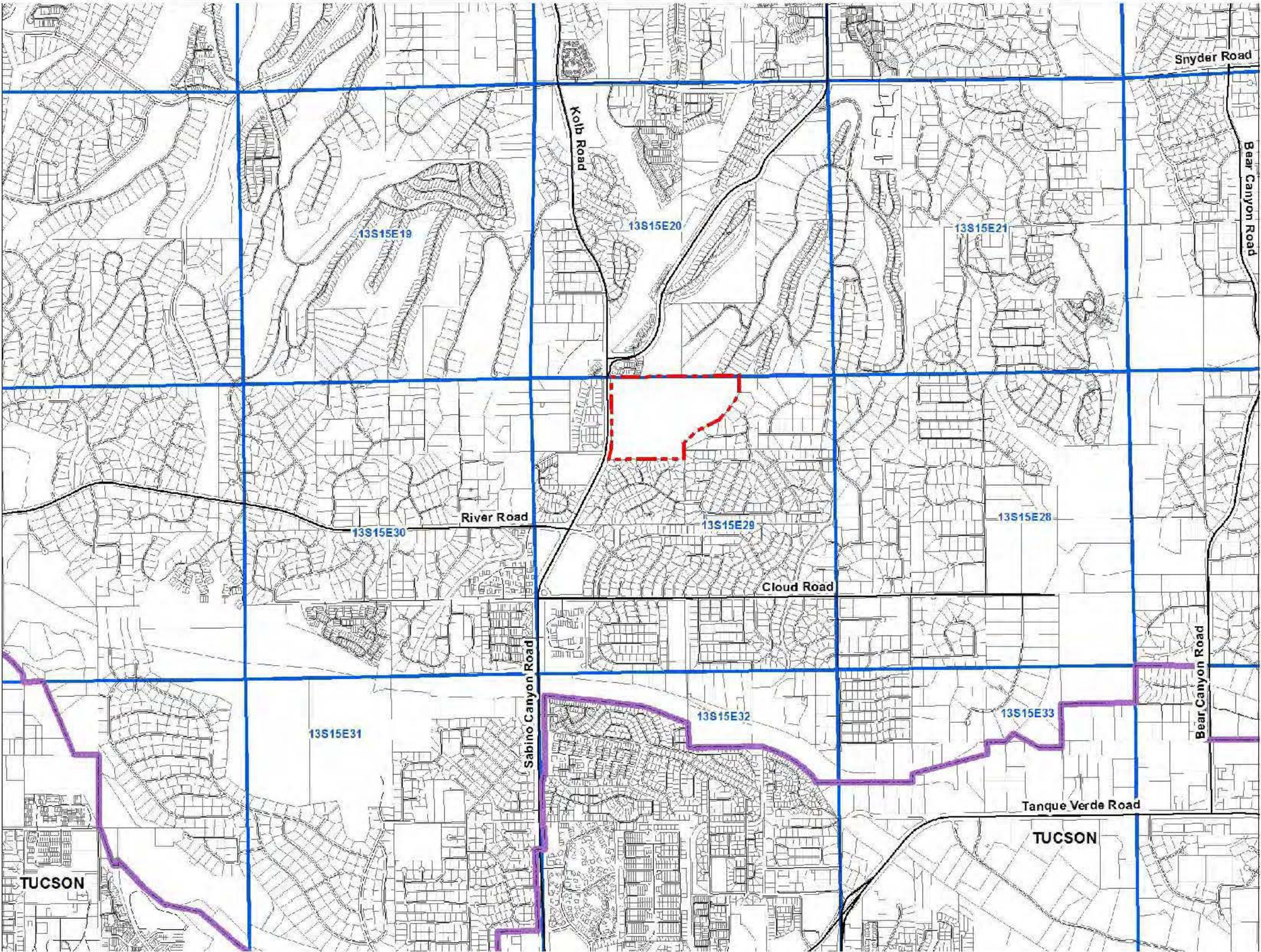
- Use of the property is restricted to a Continuing Care Retirement Community (CCRC) only.
- Along the north, west and south boundaries of the amendment site, new development shall be limited to single-story residential for the first 150'.
- Inside of the 150-foot single-story residential setback described above, an internal project core is established. Notwithstanding the zoning districts and allowable residential density range allowed under the Medium Intensity Urban (MIU) land use intensity category, within the internal project core rezoning to CB-1 Local Business Zone, or establishment of similar commercial use and development standards within Specific Plan-defined land use categories, shall be deemed in conformance with the Comprehensive Plan.
- Within the internal project core, commercial uses are further restricted to Continuing Care Residential Community accessory uses for the enjoyment of community residents and guests only.



- Within the internal project core, CB-1 zoning or equivalent Specific Plan land use categories may allow maximum building heights up to 39 feet.
- The Specific Plan process is preferred for implementation of this plan amendment.
- Any rezoning or Specific Plan shall include the eastern portion of the property not included in the comprehensive plan amendment area, with conditions limiting additional development to protect cultural resources, steep slopes and viewsheds, and to preserve natural open space.
- A letter of intent to serve from a water service provider shall be submitted as part of any subsequent rezoning application. If the letter of intent to serve is from a water service provider that does not have access to a renewable and potable water supply, the applicant will provide documentation as to why a water service provider with access to a renewable and potable water source is not able to provide service.
- No person shall construe any action by Pima County as a commitment to provide sewer service to any new development within the plan amendment area until Pima County executes an agreement with the owner / developer to that effect. By accepting this plan amendment, the owner / developer acknowledges that adequate treatment and/or conveyance capacity in the downstream public sewerage system is not available to accommodate new development in the plan amendment area at the time of plan amendment approval, and new development within the plan amendment area will need to be postponed until adequate treatment and / or conveyance capacity becomes available.



Exhibit I.A.1: Location and Vicinity



LEGEND

- Site Boundary
- Jurisdiction Boundary
- Township, Range, Section

Notes:

Project Site is located at:
Township 13S, Range 15E, and Section 29

Acreage: Approx. 63 AC

Parcel ID #s: 114-30-002C

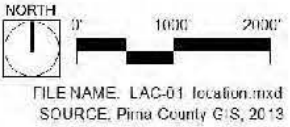





Exhibit I.A.2: Existing On-Site Land Uses



LEGEND

 Site Boundary

 NORTH



FILE NAME: LAC-01 on site landuse.mxd
SOURCE: Pima County GIS, 2013



3. Existing Off-Site Land Uses

a. Existing On-Site and Off-Site Zoning

Table 1.A.3.a: Existing Zoning & Comprehensive Plan Designation

| | Zoning | Comprehensive Plan Designation |
|---------------------|---------------|---------------------------------------|
| Project Site | SR | LIU-0.5, MIU |
| North | CR-1, CR-2 | LIU-1.2 |
| South | CR-2, CR-3 | LIU-3.0 |
| East | CR-1 | LIU-1.2 |
| West | SR, CR-4 | LIU-1.2 & 3.0, MIU, RT |

(See Exhibit I.A.3.a.1: Existing Zoning and Exhibit I.A.3.a.2: Comprehensive Plan Designation.)

b. Existing Off-Site Land Uses

Table 1.A.3.b: Existing Off-Site Land Uses

| | |
|--------------|--|
| North | Single-Family Residential, Multi-Family Residential and Vacant Land, Tucson Water reservoir facility |
| South | Single-Family Residential |
| East | Single-Family Residential |
| West | Single-Family Residential (Foothills Club, 1-39), St. Alban's Episcopal Church |

(See Exhibit I.A.3.b: Existing Off-Site Land Uses.)

c. Number of Stories of Off-site Existing Structures

Table 1.A.3.c: Number of Stories

| | |
|--------------|---------------|
| North | 1 and 2 Story |
| South | 1 and 2 Story |
| East | 1 and 2 Story |
| West | 1 Story |

(See Exhibit I.A.3.b: Existing Off-Site Land Uses.)



Exhibit I.A.3.a.1: Existing Zoning

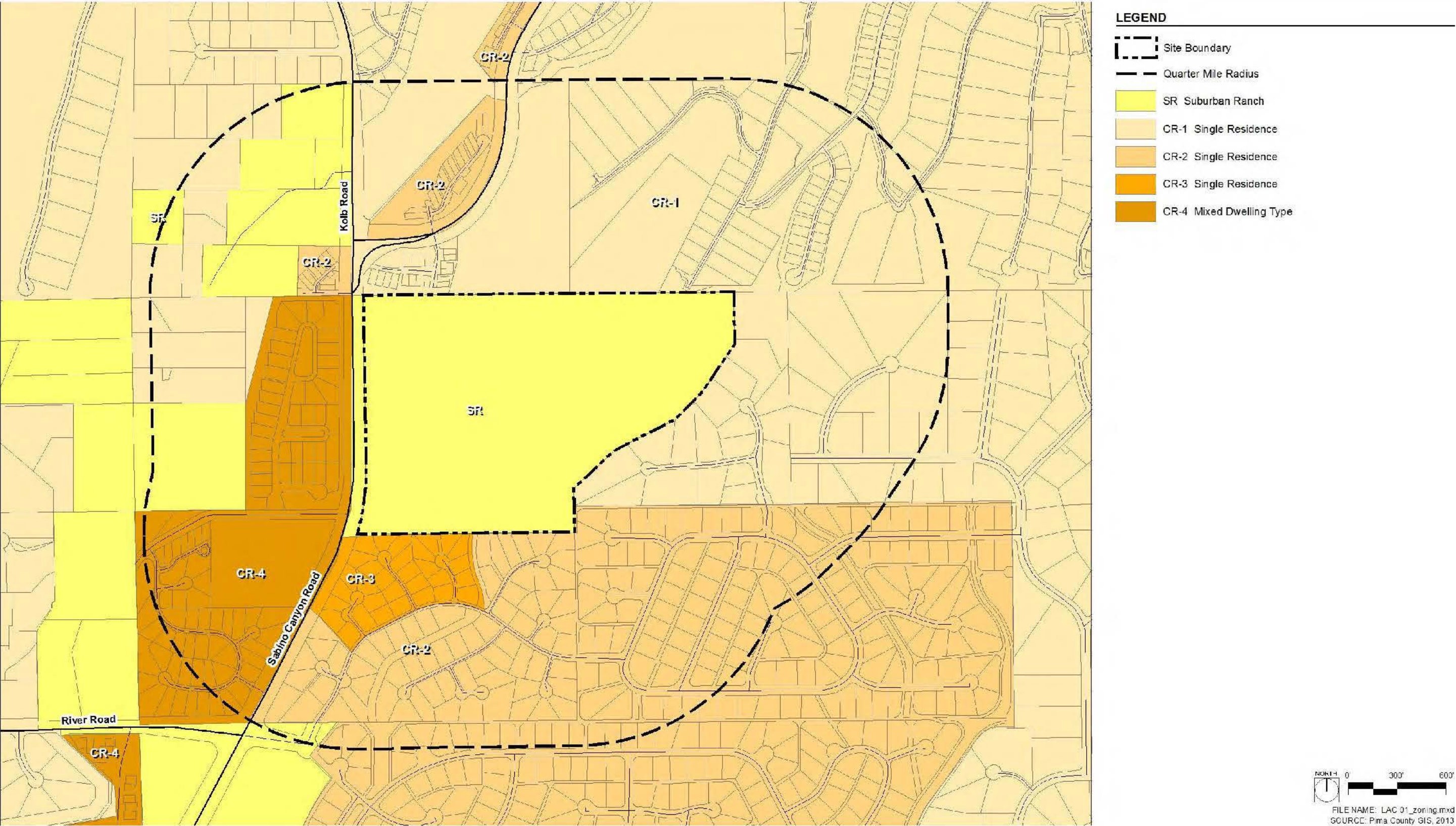


Exhibit I.A.3.a.2: Comprehensive Plan Designation

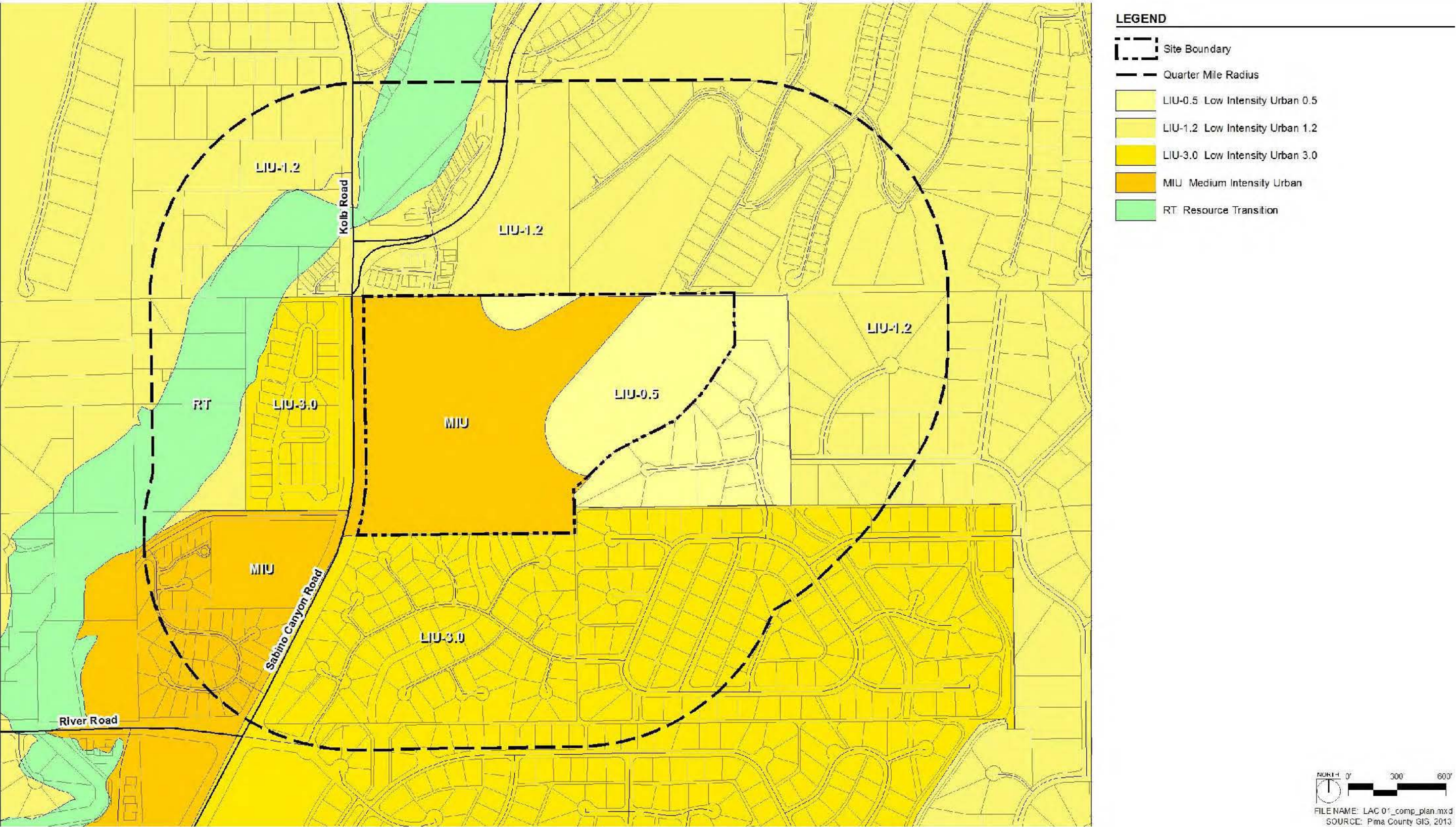
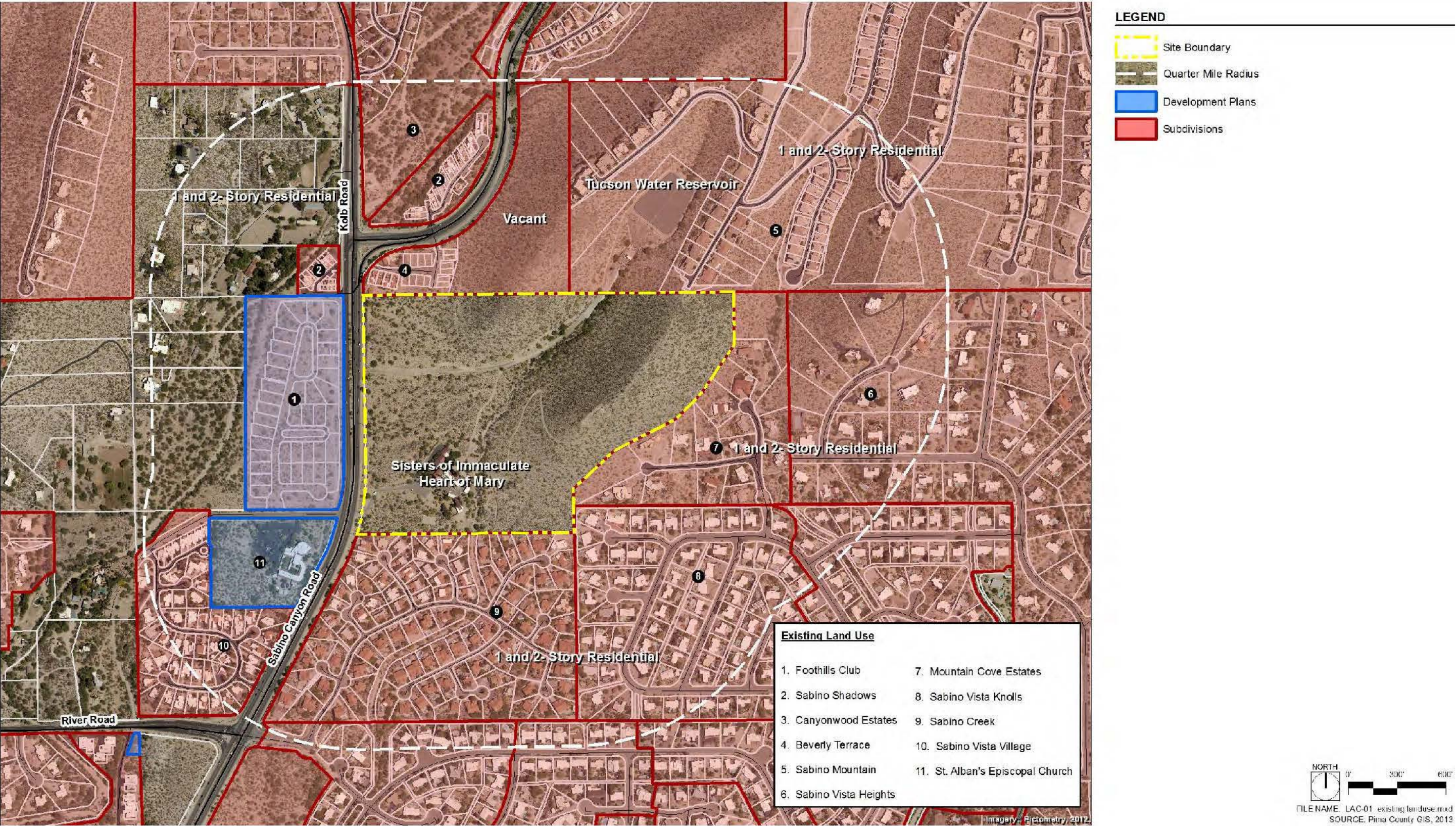


Exhibit I.A.3.b: Existing Off-Site Land Uses



d. Pending or Conditionally-Approved Rezoning and Subdivisions

There are no pending or conditionally-approved rezonings or subdivisions within one-quarter mile of the project site.

B. Topography and Grading

1. Topographic Characteristics of the Site

The site has two separate areas of topographic features, illustrated in *Exhibit I.B: Topography*. The southwestern portion of the site slopes gently from the southwest to the northeast. The northeastern portion of the site is characterized by “foothill” terrain. The elevations range from 2545 feet along Sabino Canyon Road on the west to 2795 feet on the eastern boundary of the site. The southwestern portion of the site has been developed for a religious facility, which accounts for 4.6 acres of current development including roadways. The property is in a balanced basin.

a. Restricted Peaks and Ridges or Rock Outcrops

No restricted peaks and/or ridges, as identified in Section 18.61 of Pima County Zoning Code, exist within the site or in its immediate vicinity.

b. Rock Outcrops

There are no rock outcrops on the site.

c. Slopes of 15% or Greater

The site does contain slopes of 15 percent or greater.

d. Any Other Significant Topographic Features

The “foothill” terrain on the eastern portion of the site could be considered significant.



2. Pre-development Average Cross Slope Calculations

The average cross-slope of the site is 21 percent.

The following equation, as per Pima County Zoning Code Section 18.61.051, was used to determine the average cross slope utilizing 5-foot elevation contours:

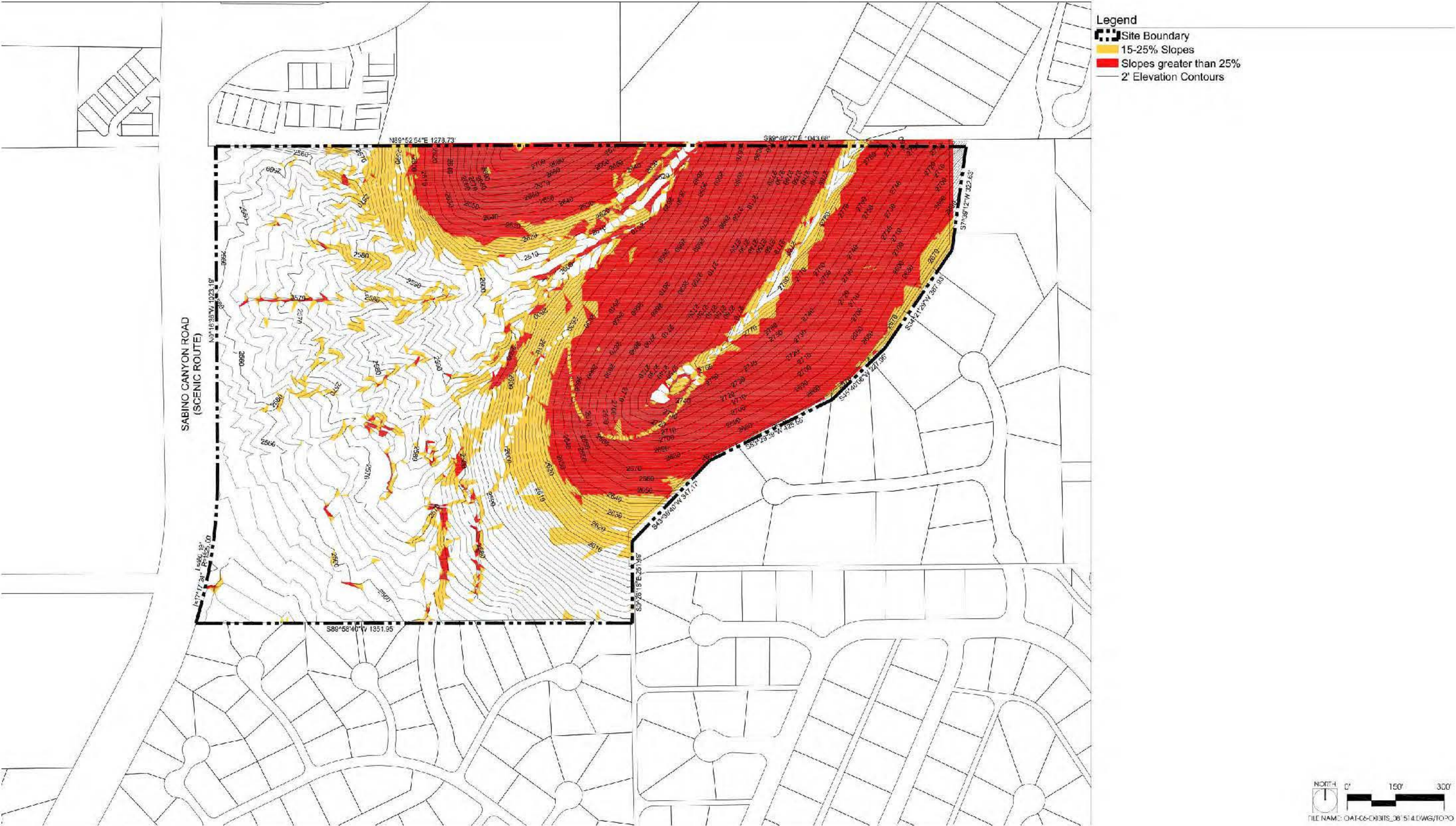
$$\text{Average Cross-Slope} = \frac{I \times L \times 0.0023}{A}$$

$$\text{Average Cross-Slope} = \frac{5 \times 116,782 \times 0.0023}{63}$$

$$\text{Average Cross-Slope} = 21 \text{ percent}$$



Exhibit I.B: Topography



C. Hydrology

1. Off-Site Watersheds

The site is affected by one upstream watershed as illustrated in *Exhibit I.C.1: Off-Site Watersheds*. This watershed labeled Concentration Point 1 (CP1) has a flow of 198 cfs where it enters the northern property boundary. The flows continue through the site to the southern boundary where they are conveyed into a rock-lined channel constructed within the Sabino Creek Subdivision. The discharge is 295 cfs at this point, CP2.

There are three drainage areas in the western portion of the site that affect downstream offsite watersheds. The northwestern drainage area (3) discharges into a roadside swale, then flows north in a concrete swale and then into a 3-foot x 3-foot RBCB at the northern property line, built with the Sabino Canyon Road improvements. The central area (4) discharges into a rock-lined roadside swale, then flows south to a catch structure and then flows under Sabino Canyon Road in two 36-inch RCP's. The southwestern area (5-7) discharges at three locations to the south: CP5 and CP6 exit through 9-foot x 1-foot 4-inch openings in the block wall and CP7 into a 12-foot wide paved area with 6-foot vertical curbs.

2. Off-Site Natural or Man-Made Features

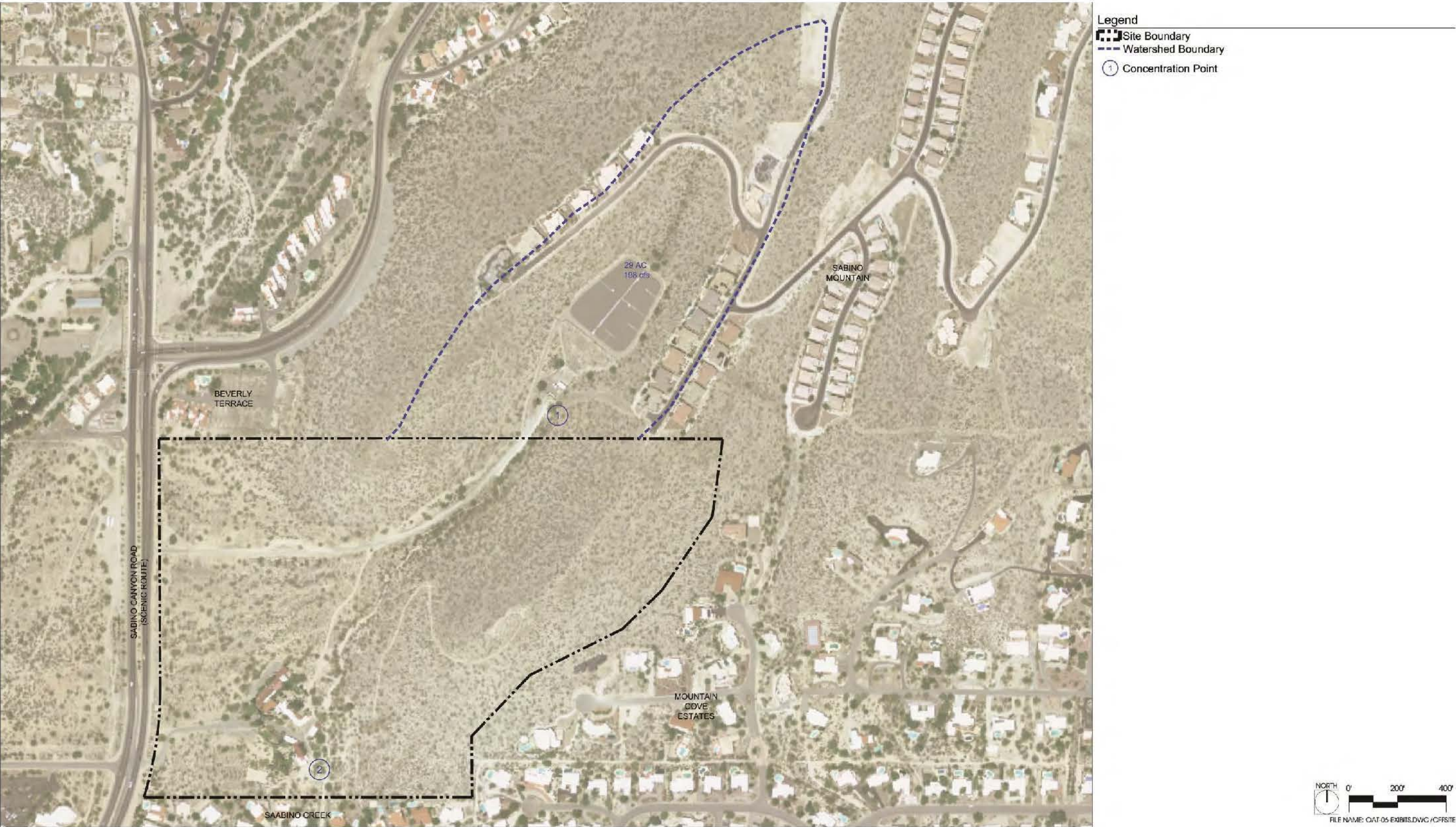
There are two residential subdivisions north of the property: Sabino Mountain and Beverly Terrace. The Mountain Cove Estates subdivision is east of the project and the Sabino Creek subdivision is along the southern boundary. Sabino Canyon Road parallels the western boundary. The Tucson Water reservoir facility located to the north is close to 4 acres in area, excluding the access road.

3. Upstream Off-Site Watersheds with 100-Year Discharges Greater than 100 cfs

The offsite watershed upstream from Watershed 1/2 has a drainage area of 29 acres.



Exhibit I.C.1: Off-Site Watersheds



4. On-Site Hydrology

Based on the existing topography, there are seven on-site watersheds. See *Exhibit I.C.4.a: On-Site Hydrology*. The major drainage, Watershed 1/2, bisects the site generally from north to south. The remainder of the site drains towards the northwest, west and southwest (Watersheds 3-7).

- a. Watershed 1/2 at CP1 has an exiting offsite flow of 198 cfs at the northern property line. The on-site drainage area is 51 acres. The flow exiting the site along the southern property line at CP2 is 295 cfs.

Watershed 3 at the northwest corner of the site has an area of 8.1 acres, with a discharge of 49 cfs into a roadside swale, which then flows north in a concrete swale into a 3' x 3' RCBC at the northern property line.

Watershed 4 drains the center of the western portion of the site. The flow from this area is 64 cfs, with a drainage area for this watershed of 11 acres in size and the flows discharge into a roadside swale, then flows south to a catch structure and then flows under Sabino Canyon Road in two 36" RCP's.

Watersheds 5, 6 and 7 are fairly small watersheds that cover the southwestern portion of the site. They each discharge to constructed drainage improvements within the Sabino Creek subdivision. Watershed 5 is 3.2 acres in size, with a discharge of 20 cfs. Watershed 6 is 2.4 acres, with a discharge of 16 cfs. Watershed 7 is 1.2 acres in size and has a discharge of 8 cfs.

- b. The average depth of sheet flow within the site is less than 1 foot.
- c. There are no federally mapped floodways or floodplains onsite. According to the FIRM (Map Number 04019C1665K), Exhibit I.C.4.c, the site is located within a Zone X. FEMA defines this zone as areas outside the 0.2% annual chance (500-year) flood.



Exhibit I.C.4.a: On-Site Hydrology

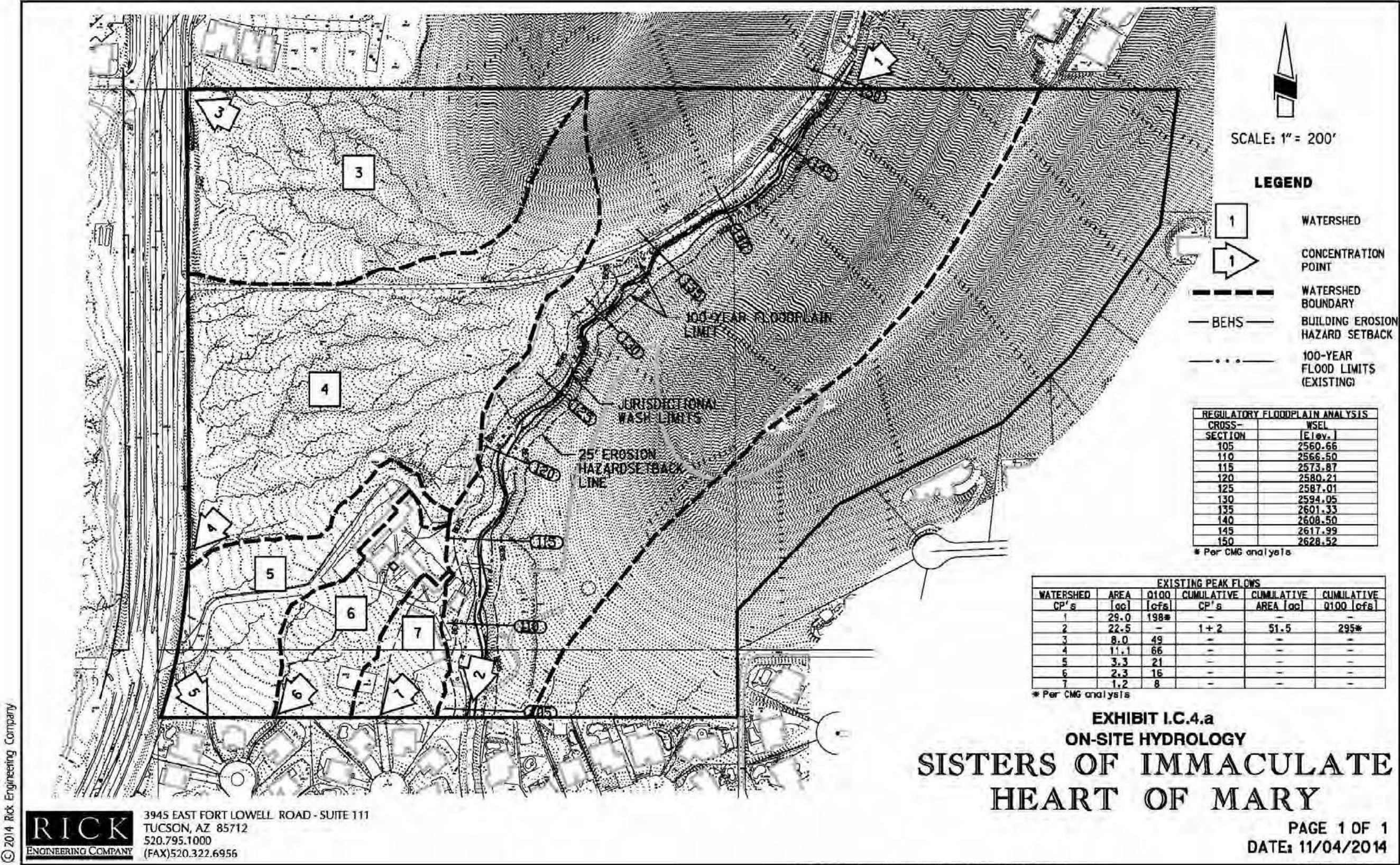
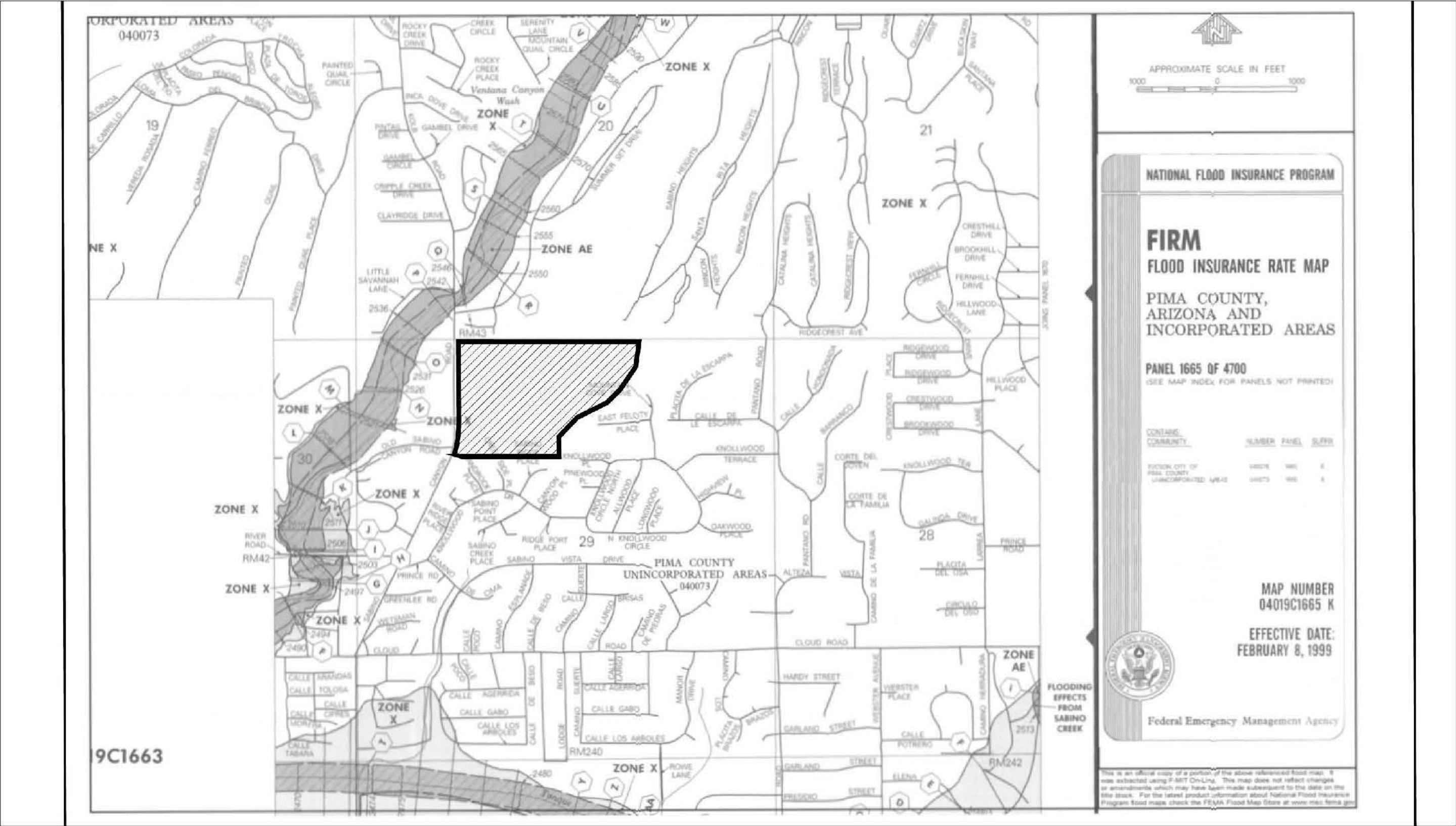


Exhibit I.C.4.b: FIRM Map



5. Existing Drainage Conditions along the Downstream Property Boundary

All of the downstream watersheds have been improved. The northwestern drainage area (CP3) discharges into a roadside swale, flows north in a concrete swale and into a 3-foot x 3-foot RCBC at the northern property line, built with the Sabino Canyon Road improvements. The central area (CP4) discharges into a rock-lined roadside swale, then flows south to a catch structure and under Sabino Canyon Road in two 36-inch RCP's. The southwestern area discharges at three locations to the south: CP5 and CP6 exit through 9-foot x 1-foot-4-inch openings in the block wall and CP7 into a 12-foot wide paved area with 6-foot vertical curbs.

D. Biological Resources

1. Conservation Lands System and Critical Landscape Connections

This project lies outside the boundaries of the Conservation Lands System and is not within a Critical Landscape Connection. See *Exhibit I.D.1: Conservation Lands System*.

2. Pima Pineapple Cactus

The subject property is not within Modeled Potential Habitat or Priority Conservation Area for the Pima pineapple cactus.

3. Priority Conservation Areas

a. Cactus Ferruginous Pygmy-Owl

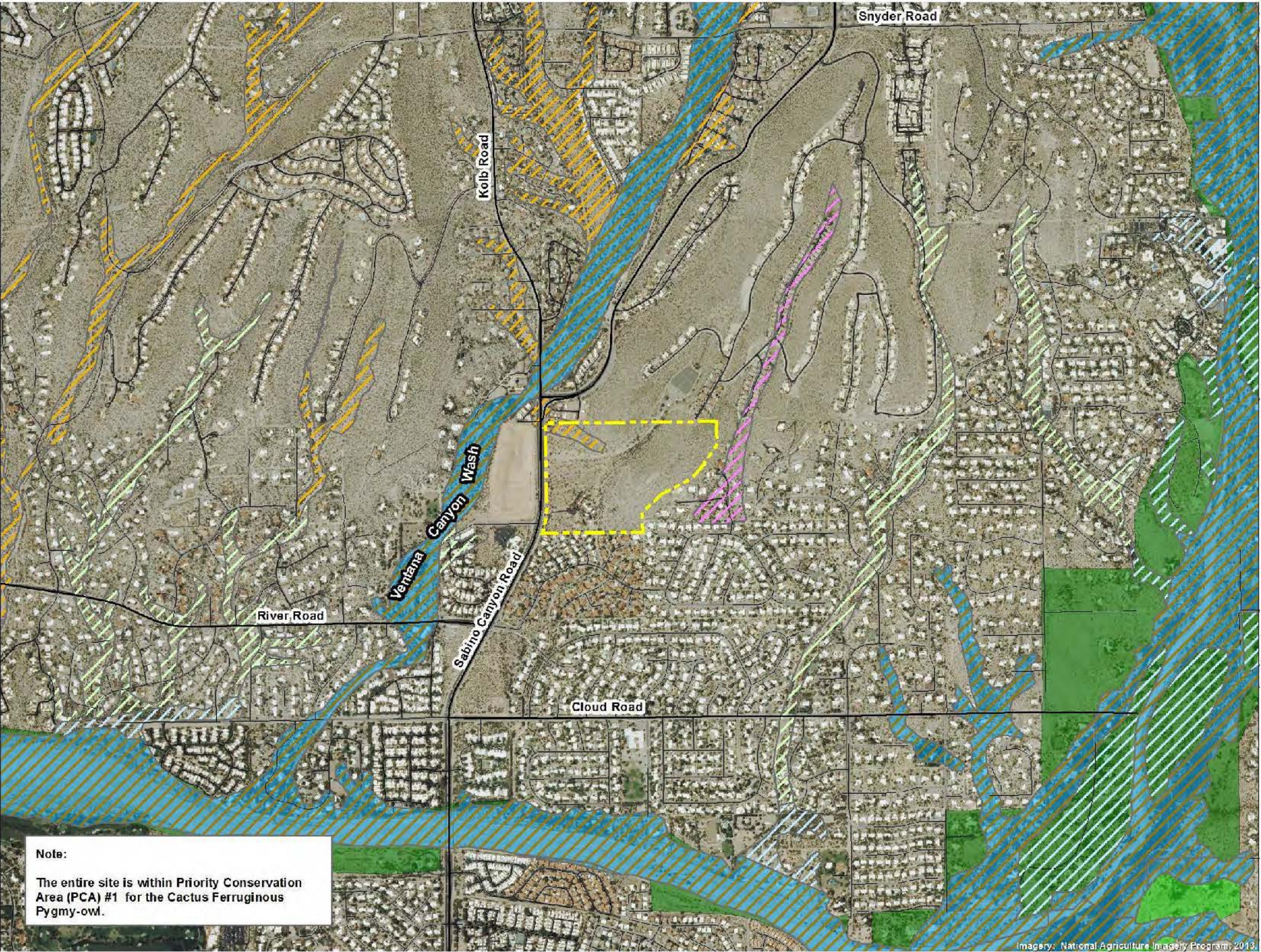
A field study on April 15, 2008 by Cottonwood Environmental Consulting, LLC determined that there were no Cactus Ferruginous Pygmy-Owls (*Glaucidium brasilianum cactorum*) inhabiting the subject property.

b. Western Burrowing Owl

On the morning of April 25, 2008, Cottonwood Environmental Consulting, LLC conducted a survey of the area of the site planned for future development to determine the presence of the Western Burrowing Owl (*Athene cunicularia*). The survey concluded that there were no Burrowing Owls present on the site.



Exhibit I.D.1: Conservation Lands System



LEGEND

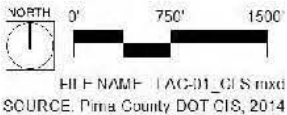
Site Boundary

Conservation Lands System (CLS)

- Biological Core Management Areas
- Important Riparian Areas
- Multiple Use Management Areas

Pima County Xeroriparian Habitat

- C
- D
- Important Riparian Area



FILE NAME: I AC-01_GIS.mxd
SOURCE: Pima County DOT GIS, 2014



4. Special Elements

According to the Pima County Sonoran Desert Conservation Plan and illustrated in *Exhibit I.D.4.a: Vegetation*, there are two Special Elements that affect the subject property. A very small portion of the site in the northwest corner is classified as Sonoran Riparian Scrub (3.2 acres). The remainder of the property, excluding the developed portion, is classified as Palo Verde Mixed-Cacti (50.1 acres). The vegetation that is classified as Sonoran Riparian Scrub is also identified as Xeroriparian Habitat Class C (XC) by Pima County.

This application contends that the area as mapped by Pima County is for the majority not indicative of Xeroriparian Habitat Class C (XC) classification and incorrect. An area-specific plant inventory and assessment were conducted in February and March 2009 to determine the vegetative composition and habitat value of the area in question. A total of approximately 645 plant species were inventoried at that time. (See *Exhibit I.D.4.b: Riparian Area Inventory* and *Exhibit I.D.9.b: Riparian Area Photos*.)

The eastern 1/3 of the currently mapped XC includes a portion of the upland hillside vegetation and topography. The topography of the western 1/2 of the currently mapped area has no discernable channel(s) and seems to be predominated by dispersed overland flows, which are not indicative of xeroriparian habitat. The western portion also supports a lower plant density and appears to have previously disturbed understory.

The currently mapped area is dominated by Palo Verde (*Cercidium microphyllum*) with smaller numbers of Native Mesquite (*Prosopis velutina*) and Whitethorn Acacia (*Acacia constricta*). The vast majority of trees within the mapped area are under 8-foot in height and 4 to 6 inches in caliper.

The existing conditions of the currently mapped area (i.e. no clear increase in plant density or plant size, upland areas included within boundary of mapped area, and previously disturbed understory,) equate to the majority of the currently mapped area consisting of little to no xeroriparian habitat value indicative of Xeroriparian Class C (XC) classification. As such, this Specific Plan proposes a map revision as noted in *Exhibit I.D.4.b: Riparian Habitat Inventory*. The revision totals 0.89 acres of proposed Xeroriparian Class C "XC" habitat. A total of 0.89 acres of XC habitat is proposed for potential disturbance and mitigation at a ratio of 1:1, which would be located within proposed basins along the preserved wash running north to south through the property.

In order to ensure an accurate and acceptable depiction of on-site riparian habitat, the Pima County Regional Flood Control District (RFCD) was consulted in 2009 following approval of the Comprehensive Plan Amendment for the property. Email correspondence with Carla Danforth of RFCD dated April 2009, confirms the lateral boundaries and the plant community survey for the mapped



on-site riparian area located in the northwest corner of the site are acceptable. RCFD's position at the time was that the mapped riparian habitat in the northwest corner no longer provides "habitat value" as it does not connect with Ventana Wash. According to RCFD, the habitat corridor was cut off from Ventana Wash by Sabino Canyon Road and associated drainage improvements and by adjacent development. The RCFD office agreed with the map revision shown in *Exhibit I.D.4.b: Riparian Habitat Inventory* but asked that the riparian vegetation within the 100-year floodplain of the watercourse flowing through the center of the site be preserved, with the exception of the road and pedestrian crossing, to provide continuity through the site to the south. It was acknowledged that the associated erosion hazard setback would need to be flexible to allow for slope protection and for roads and pedestrian crossings to bisect the habitat, but it was asked that continuity be maintained wherever possible.



Exhibit I.D.4.a: Vegetation

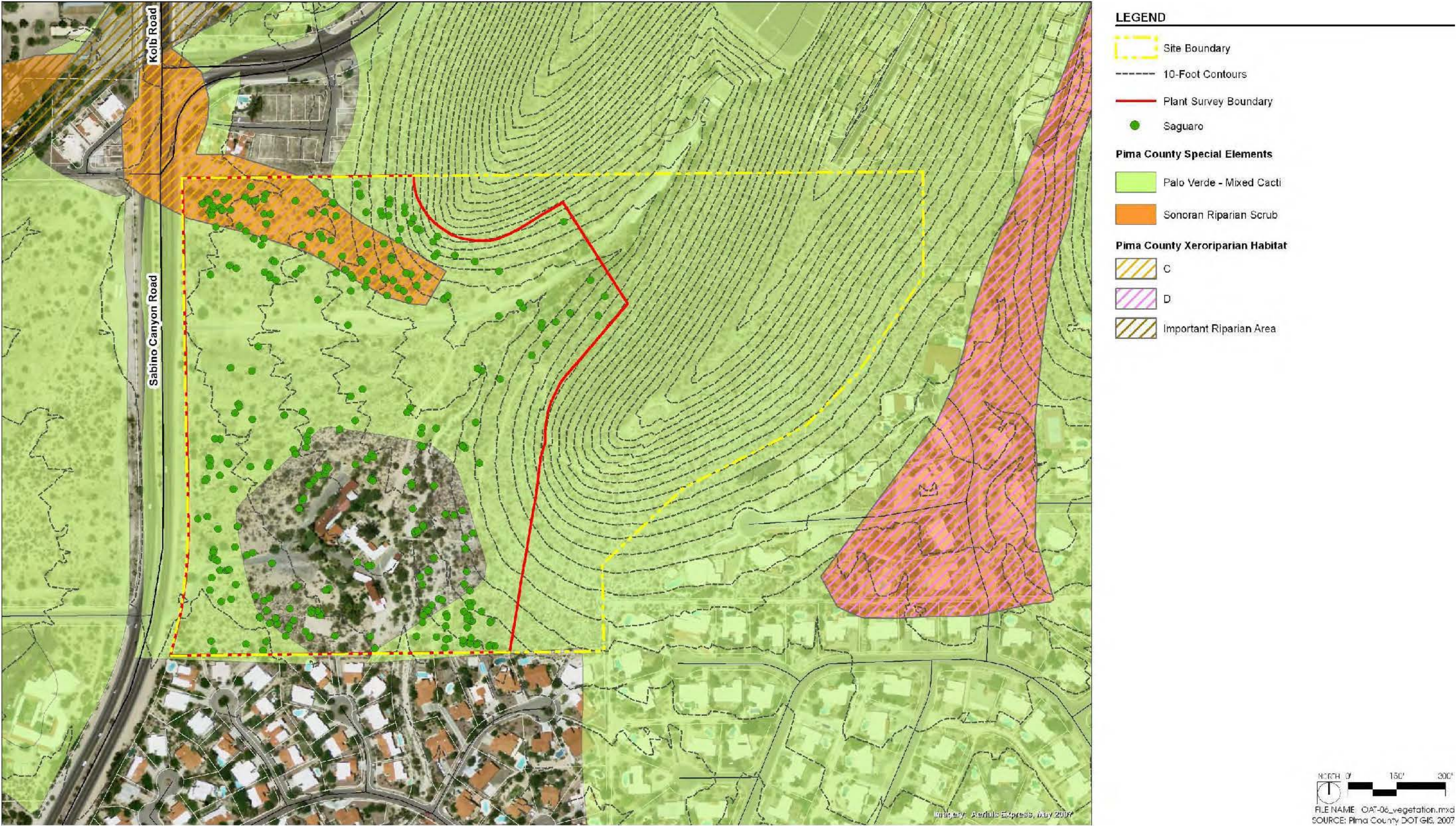


Exhibit I.D.4.b: Riparian Habitat Inventory

