

LINDA VISTA & SHANNON

REZONING SITE ANALYSIS, Revised 3rd Submittal

P16RZ00012

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INTRODUCTION

The Linda Vista & Shannon project is a proposed 78.6-acre neighborhood consisting of medium density residential lots, landscaped common areas, recreation areas, and natural open areas. Currently, the subject properties remain undeveloped. The Linda Vista & Shannon project will provide reasonable infill residential density while at the same time preserve the most environmentally sensitive portions of the site.

The proposed density increase is highly supported by the fact that it is surrounded by development of greater density, as well as the property's prominent location along the arterial Shannon Road and Linda Vista Boulevard. In accordance with the Pima County Comprehensive Plan, increased development density is encouraged alongside major arterial streets. As such, this is certainly applicable with the project's location adjacent to Shannon Road and Linda Vista Boulevard. In addition, Linda Vista & Shannon will set-aside sensitive natural desert areas on-site. Specifically, this includes riparian washes crossing through the subject properties.

In order to make this residential project a reality, the appropriate land entitlements must be acquired for the property. The property owner and partner homebuilder is focused on acquiring the necessary entitlements in Pima County, and the first step in achieving these land entitlements involves rezoning the subject properties.

The request is to rezone the property from the current SR to CR-2 using the cluster development option which will allow the proposed density, provide a generous amount of open space, and conform to the density and open space guidelines of the existing Comprehensive Plan land use designation.

I. SITE ANALYSIS AND INVENTORY

A. Existing Land Uses

1. Site Location in Regional Context

Refer to *Exhibit I-A-1: Regional Location Map*.

The property is located in unincorporated Pima County. The property consists of approximately 78.6 acres located on the east and west sides of Shannon Road, south of Linda Vista Boulevard, and north of Freer Drive. The property is represented by tax parcel numbers: 225-02-002E, 225-02-001B, and 225-04-014G.

2. Existing Land Uses, Comprehensive Plan Designations, and Easements

- a) This site is currently vacant. There are a few existing unofficial trails traversing the site and a few areas of illegal dumping.
- b) All known easements are shown on *Exhibit 1-A-2b*
- c) The current Pima County Comprehensive Plan land use categories for the site consist of the following:
 - 78.6 acres of Low Intensity Urban 0.3 (LIU-0.3), which allows development up to 1.2 homes per acre with 65% open space.

See *Exhibit I-A-4e: Comprehensive Plan Designations*.

3. Aerial Photograph

See *Exhibit I-A-3: Aerial Photograph* to view the subject property and surrounding properties within 600 feet of the subject property.

4. Existing Off-Site Zoning and Land Uses

- a) Existing Zoning

See *Exhibit I-A-4a: Surrounding Zoning* and Table-1. Existing zoning within a one-quarter mile radius:

North:	SR / CR-1 / CR-4	South:	SR / CR-1 / CR-4
Northeast:	SR / CR-4 / CR-5	Southwest:	SR / CR-4
East:	SR	West:	SR / CR-4
Southeast:	SR / CR-1 / CR-3 / CR-4	Northwest:	SR

b) Existing Land Uses

The surrounding area is typified by lots of similar or smaller size and greater density than this project proposes.

North:	Low density single-family residences with a maximum density of 0.3 R/AC, and vacant land.
	Medium density single-family residences with a maximum density of 10 R/AC.
Northeast:	Low density single-family residences with a maximum density of 0.3 residences to the acre, and vacant land.
	Medium density single-family residences with a maximum density of 10 R/AC.
East:	Low density single-family residences with a maximum density of 0.3 R/AC.
Southeast:	Low density single-family residences with a maximum density of 0.3 R/AC, and vacant land.
	Medium density single-family residences with a maximum density of 10 R/AC.
South:	Low density single-family residences with a maximum density of 0.3 R/AC, and vacant land.
	Medium Low Intensity single-family residences with a maximum density of 5 R/AC.
Southwest:	Medium Low Intensity single-family residences with a maximum density of 5 R/AC.
West:	Medium Low Intensity single-family residences with a maximum density of 5 R/AC.
Northwest:	Low density single-family residences with a maximum density of 0.3 R/AC, and vacant land.

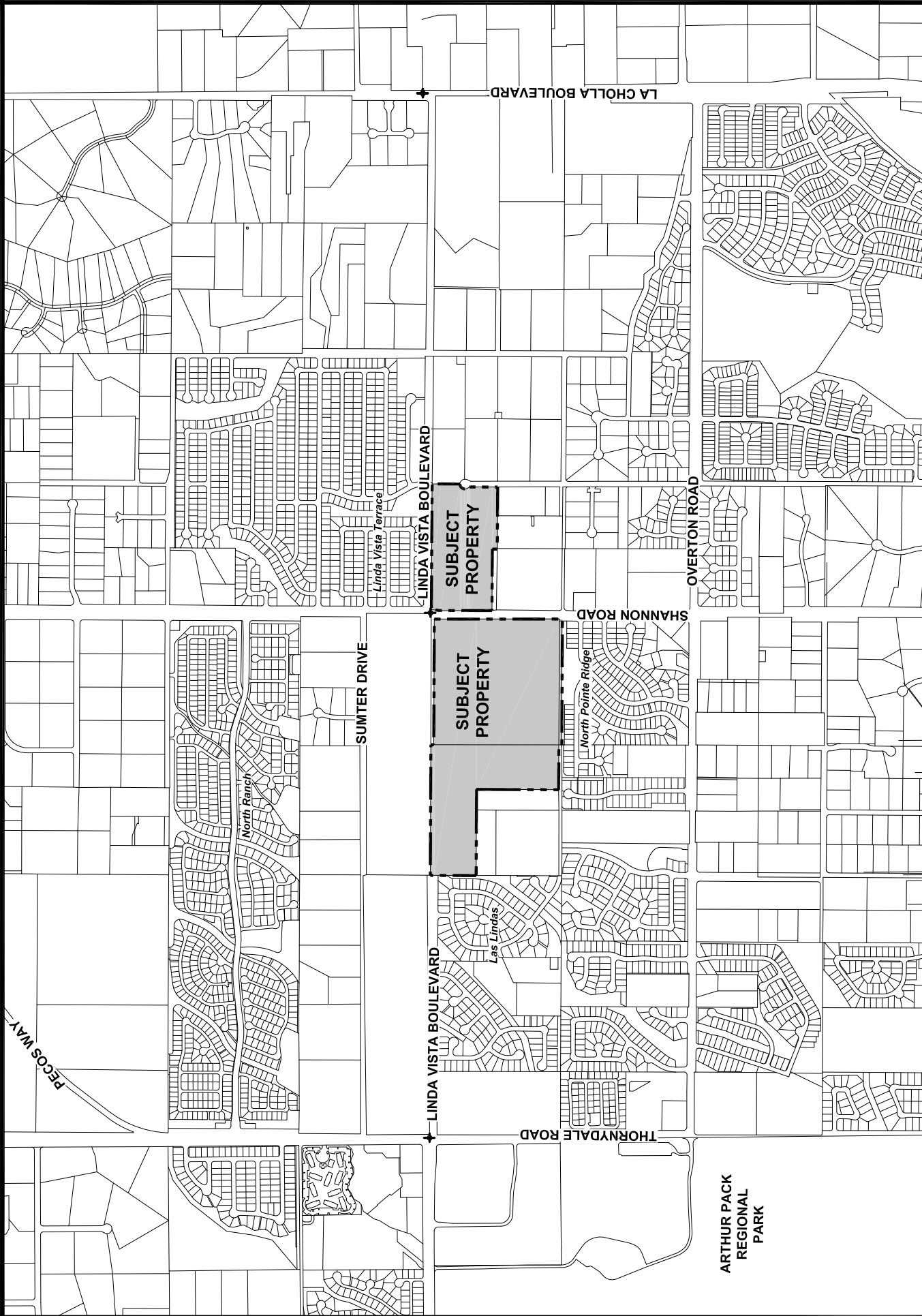
Comprehensive Plan, Zoning and Land Use			
	Existing General Plan	Existing Zoning	Existing Land Use
Subject Property	LIU 0.3, Low Intensity Urban	SR	Vacant
North	LIU 0.3, Low Intensity Urban MIU, Medium Intensity Urban	SR CR-1 CR-4	Vacant & Existing subdivisions
Northeast	LIU 0.3, Low Intensity Urban MIU, Medium Intensity Urban	SR CR-4 CR-5	Existing subdivision
East	LIU 0.3, Low Intensity Urban	SR	Large lot single family & nursery operations
Southeast	LIU 0.3, Low Intensity Urban MIU, Medium Intensity Urban	SR CR-1 CR-3 CR-4	Existing subdivisions, nursery operations, & northwest fire station
South	LIU 0.3, Low Intensity Urban LIU 1.2, Low Intensity Urban MLIU, Medium Low Intensity Urban	SR CR-1 CR-4	Existing subdivision
Southwest	LIU 0.3, Low Intensity Urban MLIU, Medium Low Intensity Urban	SR CR-4	Existing subdivision
West	MLIU, Medium Low Intensity Urban	SR CR-4	Ironwood Elementary School & existing subdivision
Northwest	LIU 0.3, Low Intensity Urban	SR	Vacant land & existing subdivision

c) Existing Structure Heights in Surrounding Area

The surrounding structures range from one to two stories.

c) The surrounding properties designated Comprehensive Plan land uses are the following: Low Intensity Urban 0.3 (LIU-0.3) and Medium-Low Intensity Urban.

See *Exhibit I-A-4e: Comprehensive Plan Designations*.



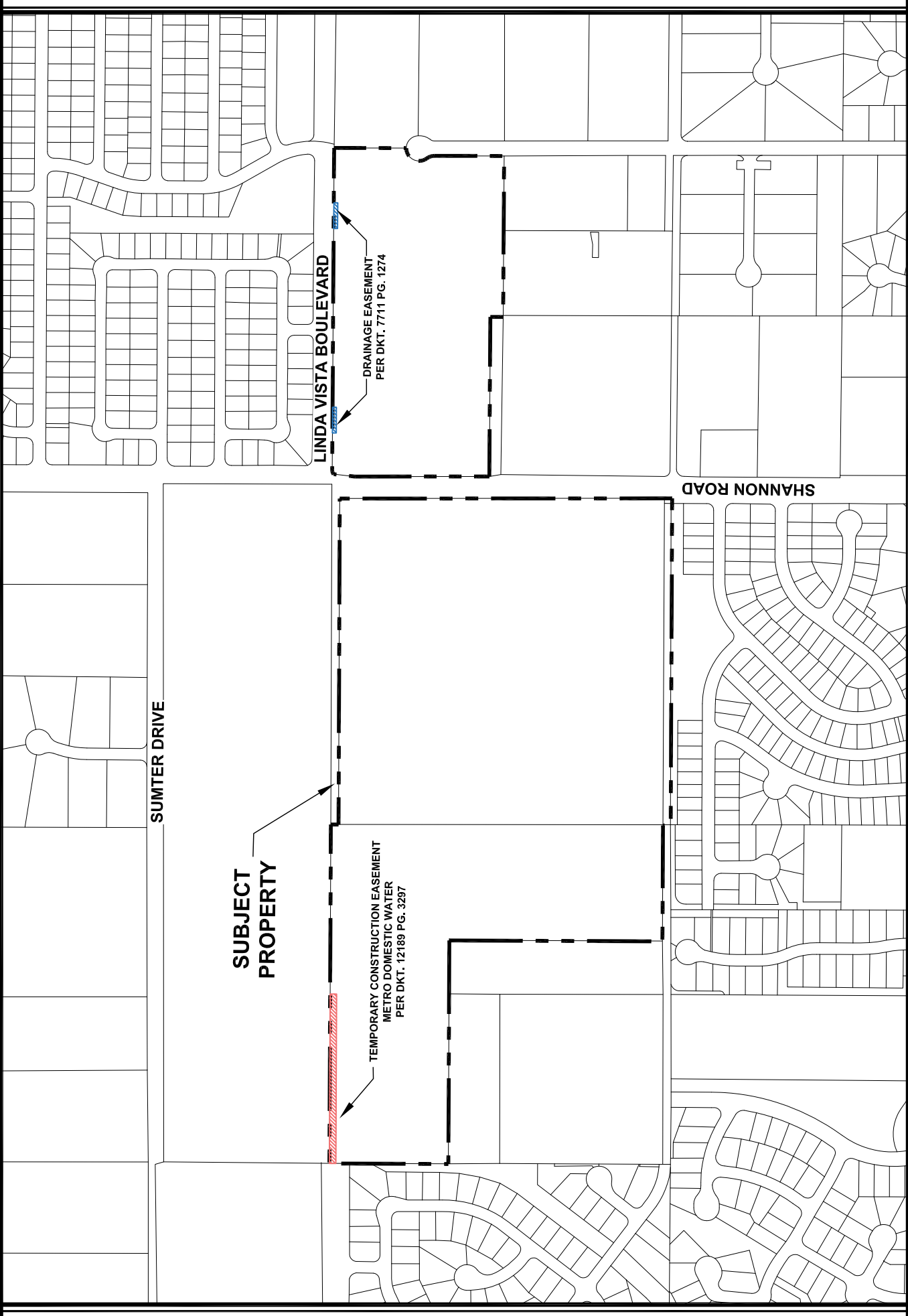
1/4 Mile



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LINDA VISTA & SHANNON I-A-1 - LOCATION MAP

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SUBJECT
PROPERTY

SUMTER DRIVE

LINDA VISTA TERRACE

LINDA VISTA BOULEVARD

SHANNON ROAD

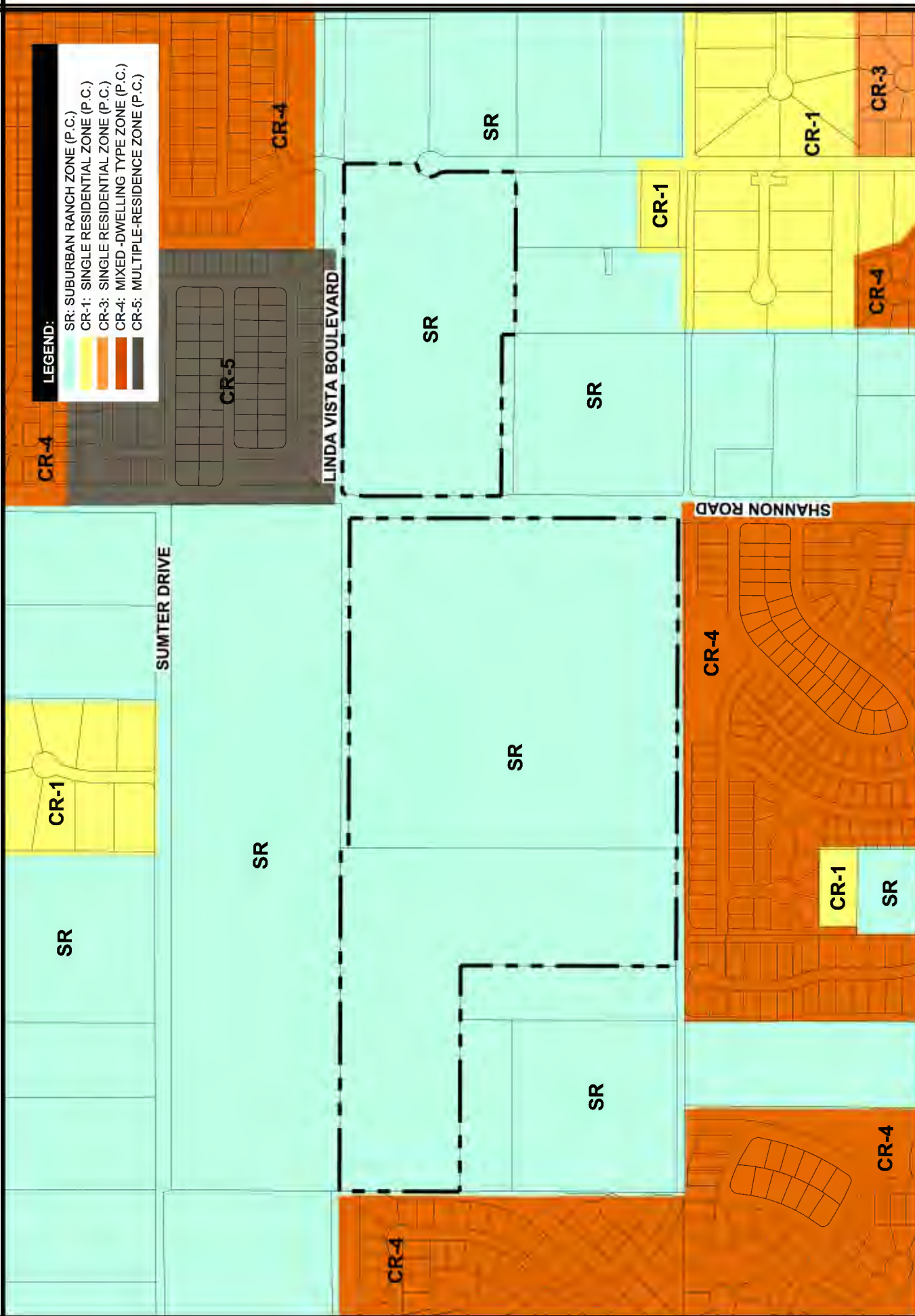
NORTH POINTE RIDGE

LAS LINDAS

IRONWOOD ELEMENTARY

ARIZONA
PISTACHIO
NURSURY

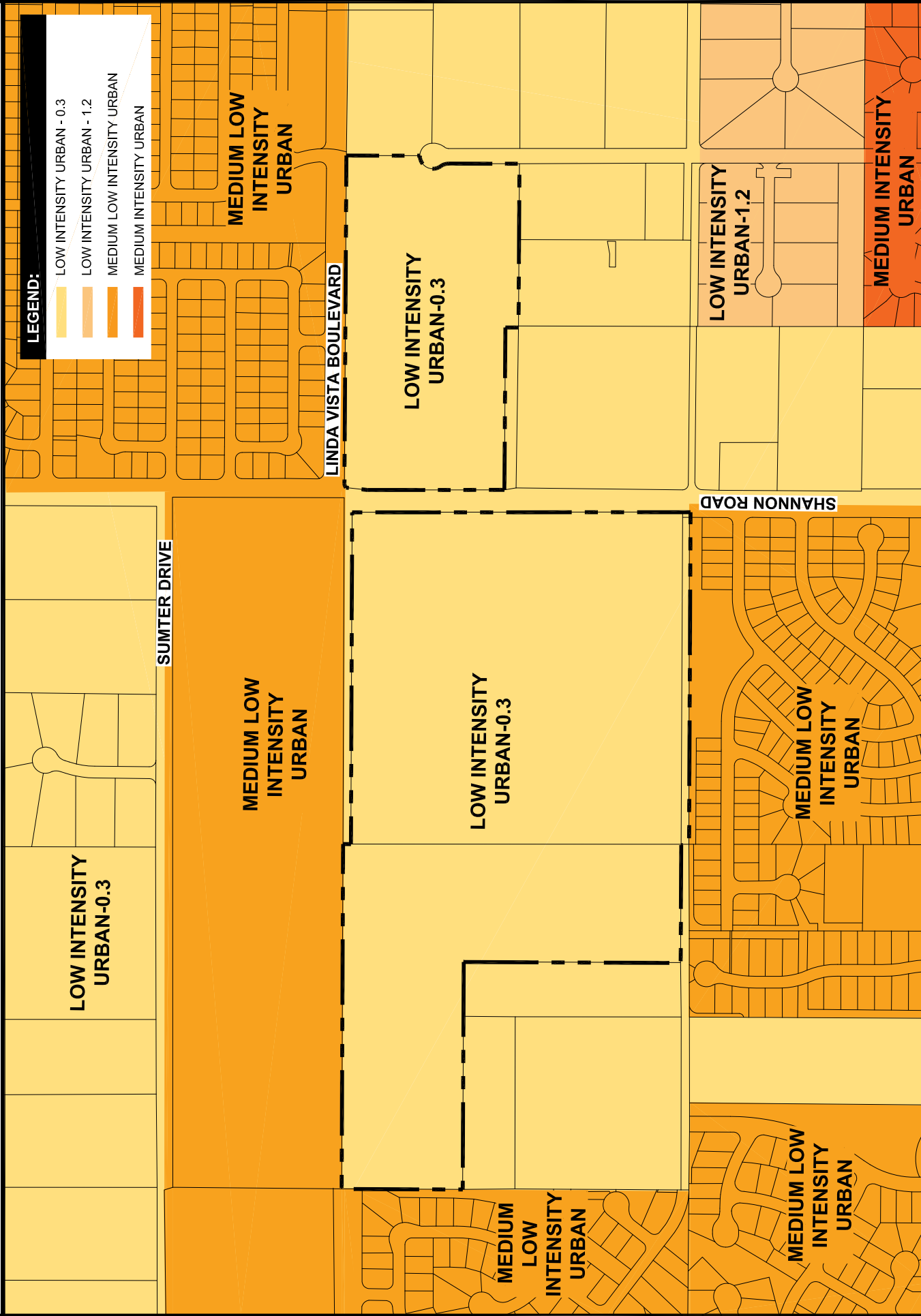




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LINDA VISTA & SHANNON I-A-4a - EXISTING ZONING

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LEGEND:

- LOW INTENSITY URBAN - 0.3
- LOW INTENSITY URBAN - 1.2
- MEDIUM LOW INTENSITY URBAN
- MEDIUM INTENSITY URBAN



B. Topography and Grading

1. Topographic Characteristics

The property generally slopes from the northeast to the southwest. Elevations range from 2,500 feet to 2,465 feet above sea level. Three minor washes cross the site generally flowing northeast to southwest across the site.

Refer to *Exhibit I-B-1: Topography*.

a) Restricted Peaks/Ridges

There are no protected peaks or ridges on the site.

b) Rock Outcrops

There are no rock outcrops on the site.

c) Slopes 15% or Greater

The Hillside Development Zone (HDZ) does not apply to the subject property. There are no regulated slopes of 15% or greater located onsite. Refer to *Exhibit I-B-1: Topography*.

d) Significant Topographic Features

There are no significant topographic features on the site.

e) Existing Grading and Ground Disturbance

There are some existing dirt roads and unofficial trails traversing the site. Some areas of the site have been utilized for illegal dumping, and off road recreation. Please refer to *Exhibit I-A-3: Aerial Photograph*.

2. Average Cross Slope (Pre-Development)

The Average Cross Slope (ACS) for the subject property is 5.19%. This calculation was based on the following formula:

$$\text{If: ACS} = ('I' \times 'L' \times 0.0023) / 'A'$$

$$\text{Where: 'I'} = 5' = \text{Contour interval}$$

$$'L' = 35486 = \text{Combined length of all contour lines in project}$$

$$0.0023 = \text{Conversion of square feet into acres times 100}$$

$$'A' = 78.6 = \text{Project site area in acres}$$

$$\text{Then: ACS} = (5 \times 35486 \times 0.0023) / 78.6 = 5.19\%$$



2016.07.07
Contour Interval = 1 Ft.
WLB No. 199031-B-001

**LINDA VISTA & SHANNON
I-B-1 - TOPOGRAPHY**

The WLB Group INC.

Q:\199031\B001 - Shannon & Linda Vista\01 Planning\04 Rezone\Site Analysis\Exhibits\B-1-Topo.dwg Plotted: Aug. 05, 2016

C. Hydrology

1. Watersheds

The subject property is located within the Hardy Wash Watershed. The Hardy Wash originates in the Tortolita Fan north and northeast of the site and is comprised of several braided natural channels and tributaries discharging through the site. The stormwater collected in these channels discharge through the site from northeast to southwest. The offsite watershed drains to an area of approximately 432 acres.

2. Drainage Features

There are no drainage improvements located on the site. Stormwater discharges from the north to the south through several natural washes. These washes have been completely modified by existing developments both north of south of the proposed project. These improvements include adding detention basins, re-routing flows, elevation by fill, and channelization.

3. Area of Upstream Watersheds

The Hardy Wash drains an area of approximately 432 acres upstream of the subject property. Refer to *Exhibit I-C-1: Off-Site Watersheds*.

4. Characteristics of Onsite Hydrology

- a) The 100-year floodplains are shown on *Exhibit I-C-4: On-Site Hydrology*.
- b) There is no sheet flow in the proposed rezoning area.
- c) There are no federally mapped floodplains within the subject property. The entire property is designated as Zone X, which are areas determined to be outside the 0.2% annual chance floodplain as defined by FIRM Panel 04019C106L revision dated June 16, 2011. Refer to *Exhibit I-C-4*.
- d) Peak discharges both entering and leaving site for 100-yr flood events: The 100-year flow in the Hardy Wash tributaries varies from 120 to 1,036 cfs discharging through the site and exiting along the southern property boundary.
- e) Regulated Riparian Habitat Classifications: Refer to *Exhibit I-C-4* for the location of Regulated Riparian Habitat within the proposed rezoning area. There are 12.4± acres of Important Riparian Area with underlying Class C and D
- f) There is no existing drainage infrastructure on the property.
- g) There are no sources of perennial surface water.
- h) There are five floodplains identified on site with a 100-year peak discharge greater than 100cfs requiring a 25 foot erosion hazard setback. There are four

floodplains (CP's 1E, 1.1E, 4E, 8E) that are less than 500 cfs requiring a 25 foot erosion hazard setback. There is one floodplain (CP 5E) with a discharge value of 500 to 2,000 cfs requiring a 50 foot erosion hazard setback.

5. Existing Drainage Conditions along the Downstream Property Boundary

The Hardy Wash tributaries identified as concentration points 3E, 2E, 1E, 1.1E exit the property on the south side at a dirt road along the Freer Drive alignment. From this point, stormwater is collected in a detention basin at the intersection of Monmouth Street and New Hampshire Drive within the North Pointe Ridge Subdivision. It is conveyed underneath Monmouth Street via a culvert in the road, then channelized for approximately 1,500 feet southwest of this point to Overton Road. It then continues toward the Santa Cruz River approximately four miles west of the subject property.

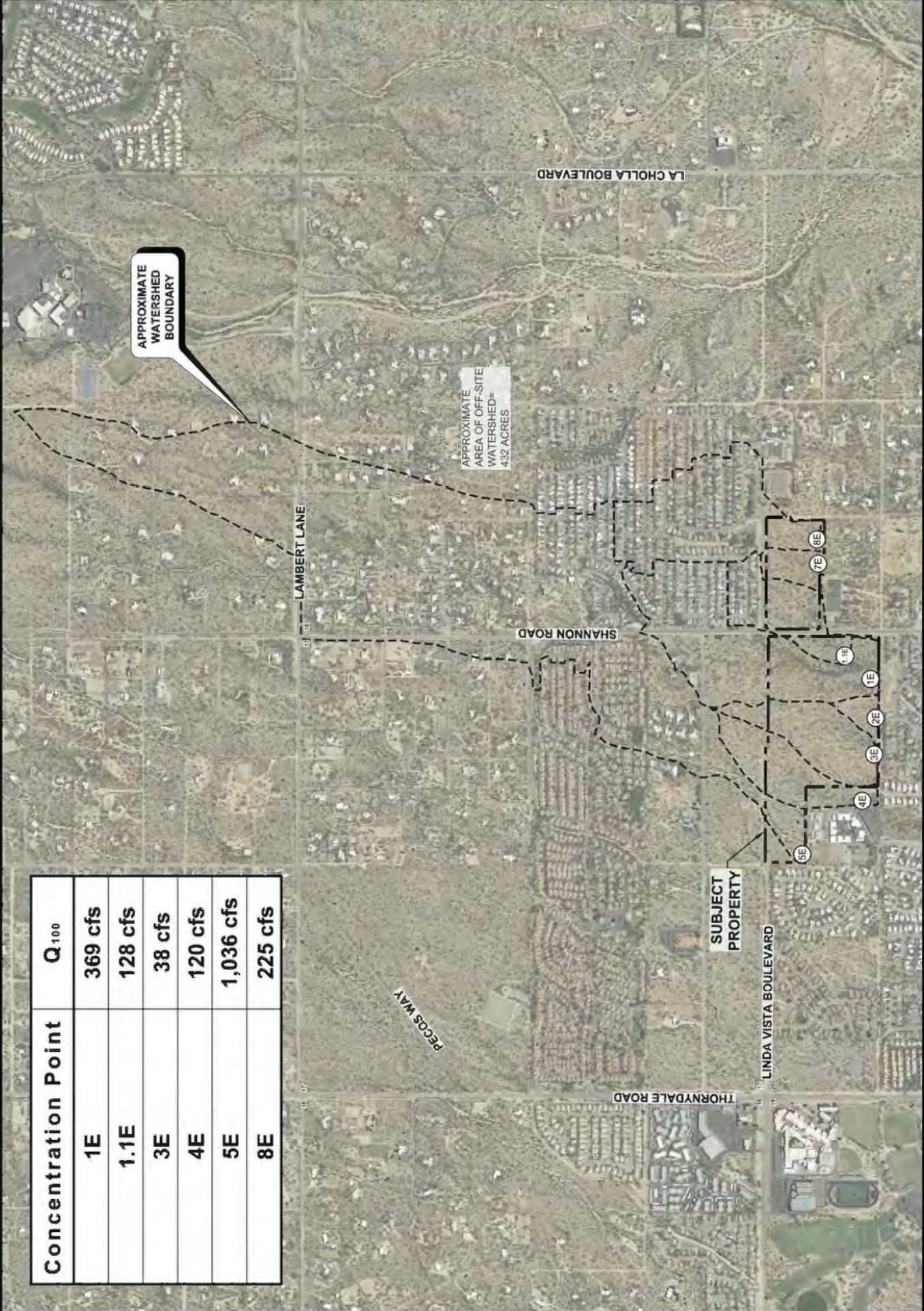
Concentration point 4E exits the property on the east side of Ironwood Elementary School where it is channelized. The wash then is conveyed underneath Freer Drive via culvert and continues south where it connects with neighboring tributaries.

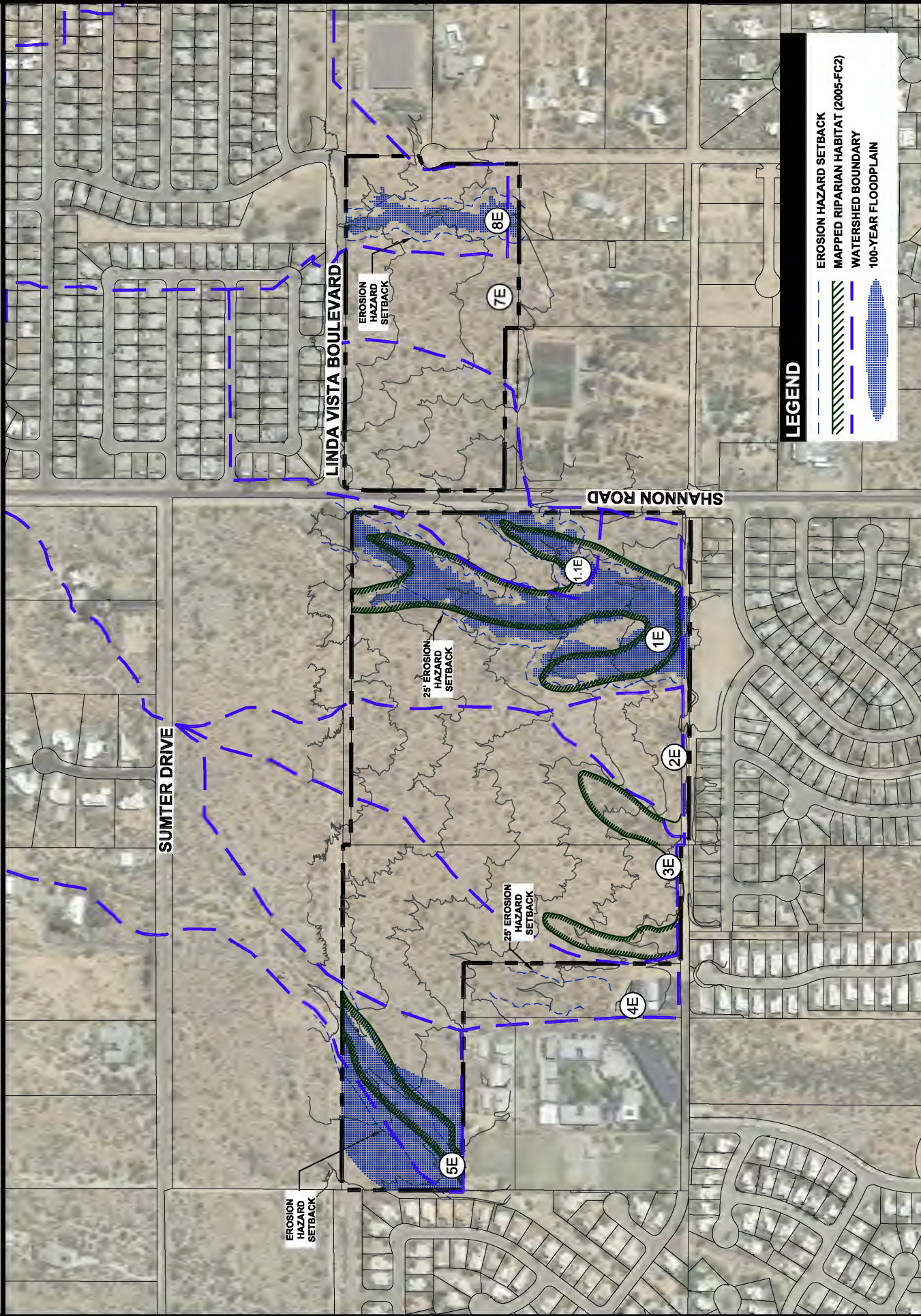
Concentration point 5E, which is not impacted by the proposed development, exits the property on the west side of Ironwood Elementary School and passes through Las Lindas subdivision. It then crosses Crestone Drive and continues to the southwest where it eventually connects with the neighboring tributaries.

Concentration point 8E on the eastern edge of the site flows to the south through low density residential lots then crosses Camino del Sur where it passes through an unbuilt large lot subdivision. It then is conveyed underneath Shannon Road via culvert where it eventually connects with the neighboring tributaries.

Please refer to *Exhibit I-C-1: Off-Site Watersheds* for location of concentration points and peak discharges.

Concentration Point	Q ₁₀₀
1E	369 cfs
1.1E	128 cfs
3E	38 cfs
4E	120 cfs
5E	1,036 cfs
8E	225 cfs





LEGEND

- EROSION HAZARD SETBACK
- MAPPED RIPARIAN HABITAT (2005-FC2)
- WATERSHED BOUNDARY
- 100-YEAR FLOODPLAIN

LINDA VISTA & SHANNON I-C-4 - ON-SITE HYDROLOGY

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2016.07.08
Aerial Photo Date = 2014
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500'

