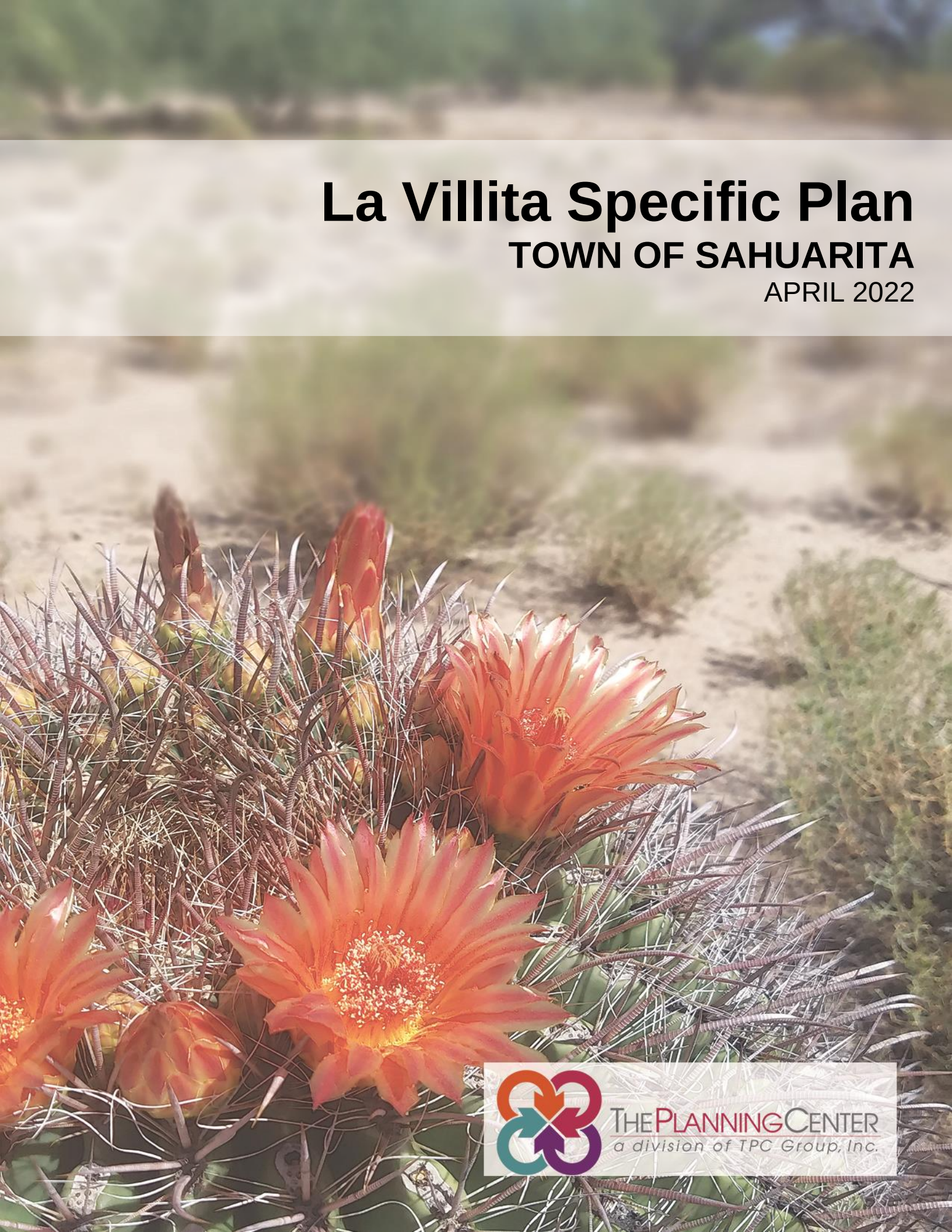
La Villita Specific Plan

TOWN OF SAHUARITA

APRIL 2022



THE PLANNING CENTER
a division of TPC Group, Inc.

La Villita Specific Plan

1.5 miles south of Sahuarita Road on La Villita Road

Prepared for:

Town of Sahuarita
Planning and Zoning Division
375 West Sahuarita Center Way
Sahuarita, Arizona 85629

Project applicant:

Green Valley 28 LLP
2776 East Virginia Street
Gilbert, AZ 85296
(602) 689-0128

Prepared by:

The Planning Center
2 East Congress Street, Suite 600
Tucson, Arizona 85701
(520) 623-6146

With assistance from:

Rick Engineering
3945 East Fort Lowell Road, #111
Tucson, Arizona 85712
(520) 795-1000

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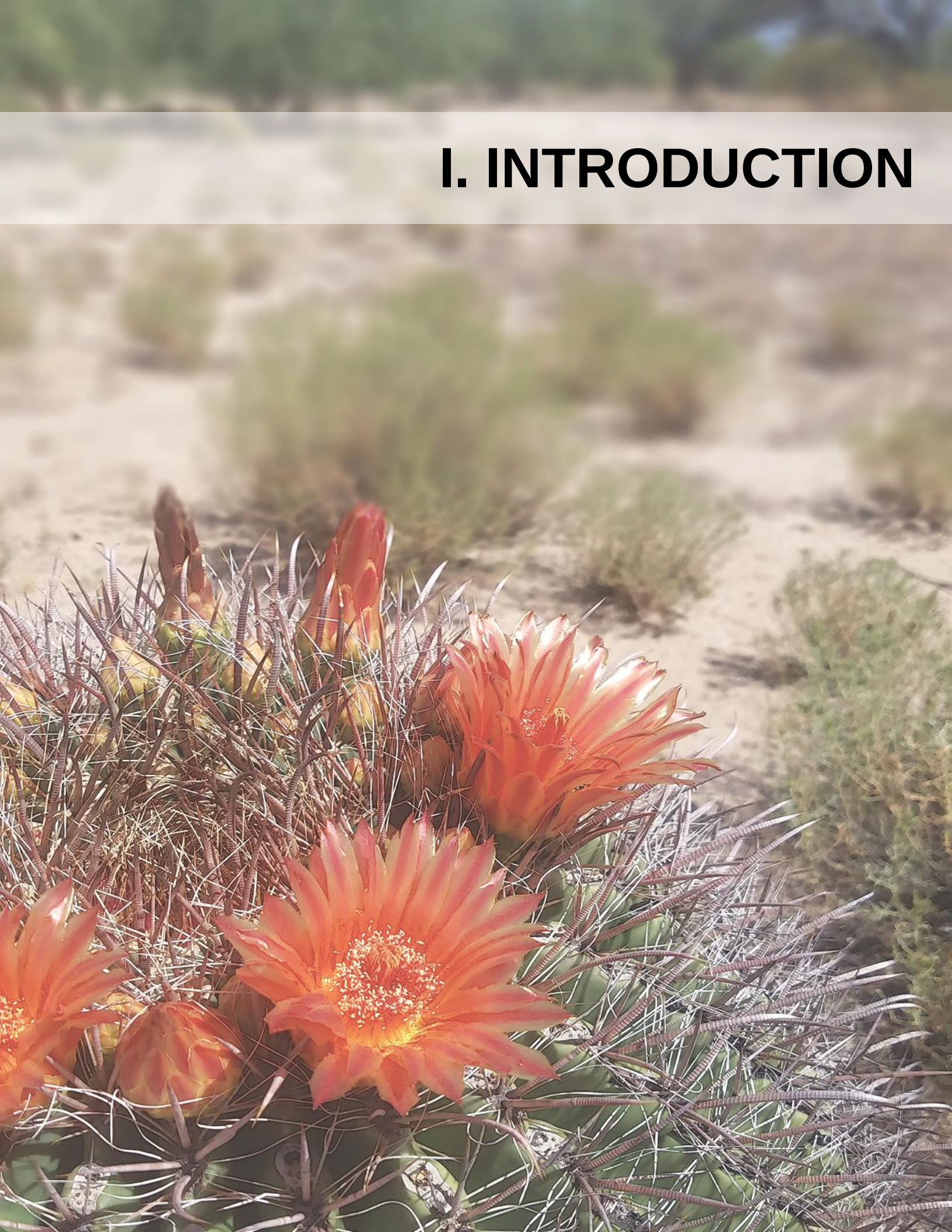


I. INTRODUCTION

A. PROJECT OVERVIEW

Green Valley 28 LLP is pleased to present La Villita Specific Plan (LVSP), a master plan and custom set of development standards and regulations for 162-acres of vacant land on La Villita Road, approximately one and a half miles south of Sahuarita Road.

The planned project will take primary access from La Villita Road and provide a future connection to the planned extension of Rancho Sahuarita Boulevard to the west. La Villita Road will also be improved with drainage infrastructure, paving and a new walking and biking path, and will eventually be connected to Nogales Highway.

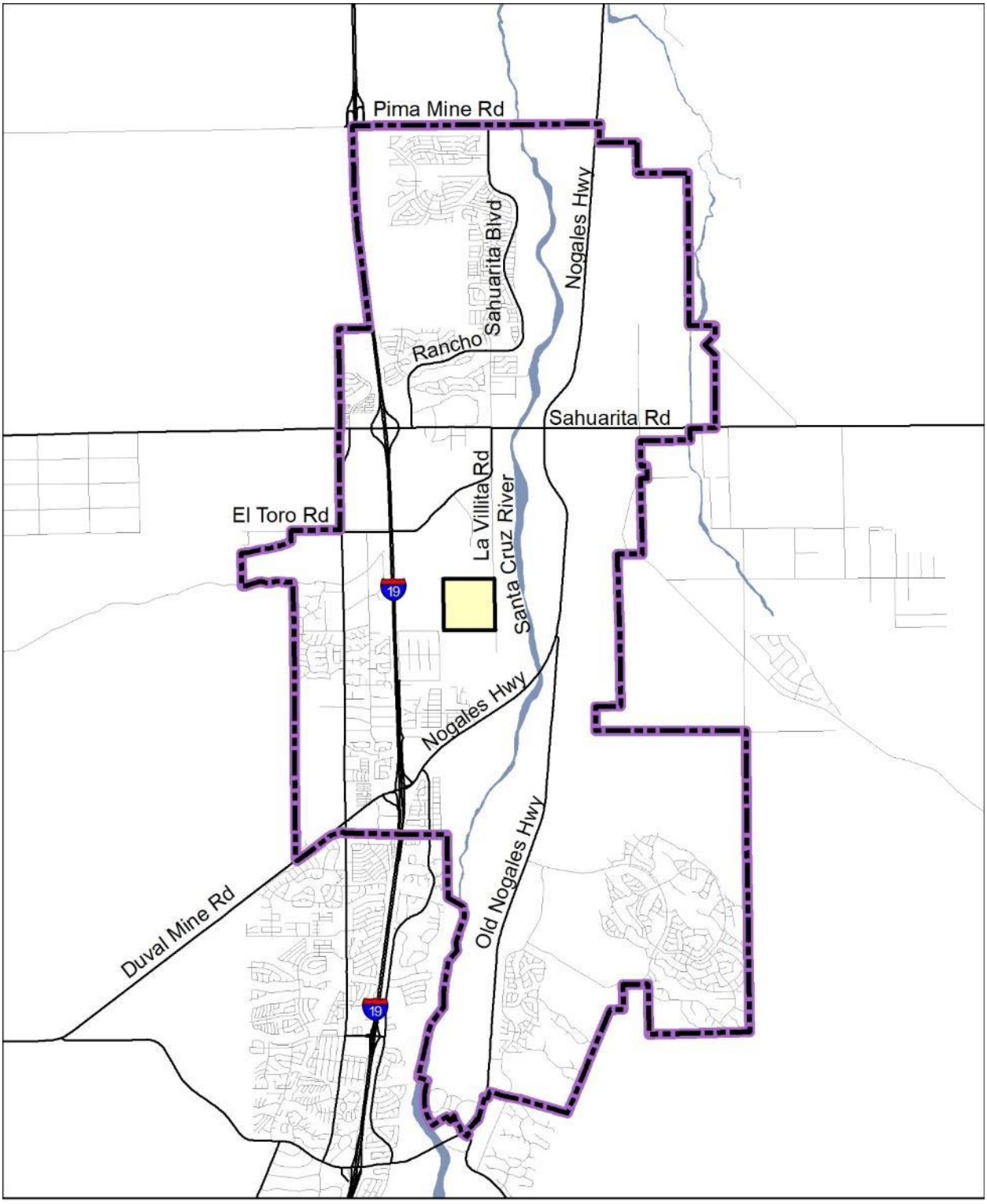
La Villita Specific Plan will be the first development within the recently adopted Sahuarita Square District (SSD). The Sahuarita Square District is an area that has been identified by the Town of Sahuarita for future growth and development. In keeping with the goals of the SSD, La Villita Specific Plan will allow for a mix of housing types and other compatible uses to create a live-work-play environment.

LVSP's vision is for a multi-phase residential community with a variety of housing sizes and types and the flexibility to accommodate complementary commercial and civic uses such as schools, religious uses, offices, fitness studios, coffee shops, drug stores, restaurants, and other neighborhood services. In addition to detached single-family homes, other potential residential options include town homes, apartments, or condos, which will provide a variety of housing options for individuals and families at different stages of life.

La Villita Specific Plan will both activate the Sahuarita Square District and act as a bridge between the two largest master planned areas in Sahuarita: Rancho Sahuarita and Sahuarita Farms. La Villita Specific Plan will allow development similar in character and intensity to what is planned for these two neighboring master planned communities. Improvements to the site, including new streets, drainage infrastructure and utilities, will create new development potential for the overall area. A network of open space and green space will link the community to neighboring properties.

La Villita Specific Plan creates the framework for a development that can respond to changes in market conditions while meeting Sahuarita's goals of high quality of life through economic, social and environmental sustainability.

Exhibit I.A.1: Location Map



B. CONFORMANCE WITH ADOPTED PLANS

La Villita Specific Plan (LVSP) is consistent with the policy recommendations in the Town of Sahuarita's General Plan, *Aspire 2035* and the recently adopted General Plan amendment, the Sahuarita Square District (SSD).

1. Aspire 2035

La Villita Specific Plan conforms with goals and policies of Sahuarita's General Plan, *Aspire 2035*, by introducing development into a designated growth area. The planned land use pattern encourages a mix of uses and provides an opportunity for increased density. Accompanying transportation infrastructure coincides with the planned extensions of La Villita Road and Rancho Sahuarita Boulevard. A system of trails, sidewalks and bike lanes ensure a variety of transportation options, while associated utility and drainage infrastructure will bring improvements to the area, potentially spurring additional growth. Open space incorporated throughout the plan will introduce a high-quality natural element to a previously disturbed area. Other related General Plan policies include:

GA-1.1: Prioritize growth in areas with planned or existing infrastructure.

a. LVSP is located along the planned extensions of La Villita Road and Rancho Sahuarita Boulevard and infrastructure improvements associated with these two roadways.

GA-1.4: Focus new higher intensity development in key identified growth areas that will encourage mixed-use development and the use of transit within the community.

a. LVSP is located in the Sahuarita Square District Special Planning Area and within a designated growth area.

GA-2.3: Partner with landowners to rezone Growth Areas to a mixed-use category to encourage their development.

a. LVSP seeks Specific Plan zoning to allow for a mix of uses.

TRN-4: Ensure that roads are appropriately and functionally classified to create an integrated transportation system.

a. As part of this development, roadway improvements will integrate with the Town's transportation system.

PFS-4: Plan for wastewater services for current and future populations.

a. LVSP is located within the Town's Designated Management Area (DMA) and will connect to existing wastewater infrastructure.

PFS-5: Ensure that new developments are constructed in a manner that minimizes flood hazards.

a. On-site drainage improvements will minimize flood hazards.

PFS-7: Plan future utilities, facilities and services in a logical, cost effective, functional, efficient and sustainable manner.

a. LVSP is in the center of Sahuarita. The Specific Plan outlines utility, drainage, open space and recreation improvements while supporting existing facilities and services.

REC-1: Provide a safe, accessible and integrated network of parks, trails and open space.

a. A network of trails, open space and recreation areas will be incorporated into the site development

2. Sahuarita Square District

LVSP is located within the Sahuarita Square District (SSD), adopted in 2019 as a major amendment to *Aspire 2035*. The major amendment to the general plan designates the SSD as a Special Planning Area within a designated growth area, and the land use as mixed-use. The mixed-use designation allows properties within the district to incorporate one or more land uses (**see Exhibit I.B.2: Sahuarita Square District Map**).

La Villita Specific Plan conforms with the Sahuarita Square District goals and policies by encouraging high quality, flexible development that can respond to market conditions and incentives. LVSP provides opportunity for a variety of housing types at a low to medium density as well as a complementary mix of land uses. Related policies include:

SSD-2.1: Create a strong sense of place by promoting complementary architectural character offering opportunities for unique, distinctive design of different developments.

a. LVSP includes design standards to complement the SSD.

SSD-2.2.1: Promote a complementary mix of uses.

a. LVSP outlines a vision providing a mixture of complementary residential and commercial uses.

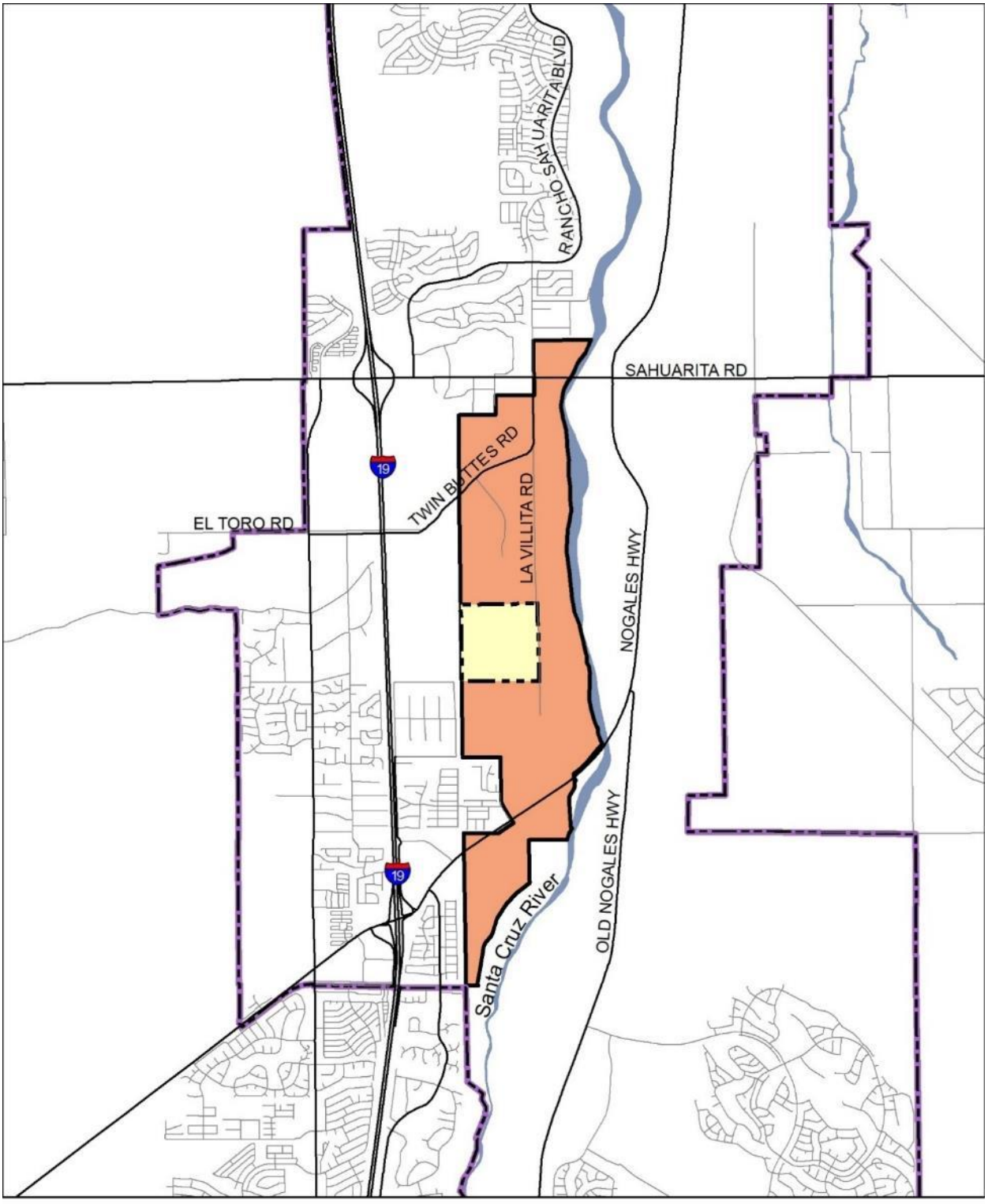
SSD-2.2.3: Allow increasing residential densities in conjunction with more intense mixed-use development.

a. LVSP promotes increased densities and intensities.

SSD-2.3.1: Integrate higher density housing such as townhomes and condominiums into higher-intensity, mixed use development to ensure all public spaces are well used and active for the entirety of each and every day.

a. LVSP promotes integration for a variety of housing types including townhomes, apartments and condominiums. Live/Work units are a permitted use as is the ability to have higher density housing mixed with commercial and other nonresidential uses. The variety of housing, work environments and recreation amenities allowed in LVSP creates an ideal live-work-play environment where public spaces are continuously used.

Exhibit I.B.2: Sahuarita Square District Map



C. COMPATIBILITY WITH ADJOINING LAND USES

La Villita Specific Plan (LVSP) proposes a mix of uses that are compatible with neighboring lands. Land uses surrounding La Villita Specific Plan site include the following:

1. Sahuarita Farms Specific Plan

Farmers Investment Company (FICO) owns and operates pecan groves across La Villita Road east of the subject property and vacant land to the south. These properties are part of the larger Sahuarita Farms Specific Plan (SFSP), an approved specific plan that details the future development of FICO's land. The SFSP identifies the land adjacent to the subject property as Village Neighborhood (Subarea 13), targeting a total of 2,100 homes. The Village Neighborhood designation is for a variety of residential land use offerings, and neighborhood-scaled retail and employment uses for local residents. La Villita Specific Plan proposes a similar land use mix with a variety of housing options and the potential to incorporate small-scale commercial and civic uses along La Villita Road.

La Villita Road is a vital connection for developing this project and this portion of the SFSP. The improvements to La Villita road associated with LVSP will benefit FICO in the future as well as the near term. In the near term, the extension of La Villita Road south along the eastern boundary of LVSP property will provide FICO with better access to its existing pecan operations. The extension of La Villita will also bring the road closer to its ultimate build-out of connecting to Nogales Highway to the south.

2. Rancho Sahuarita Specific Plan

Rancho Sahuarita owns the undeveloped land to the west of the subject property. This land is part of a future phase of the Rancho Sahuarita Specific Plan (RSSP). The RSSP identifies the adjoining land as medium to low density residential development. LVSP envisions primarily residential land use transitioning from the RSSP residential areas eastwards towards the Village Neighborhood area of SFSP. The RSSP also calls for Rancho Sahuarita Boulevard to be extended south of Sahuarita Road and to terminate at the western boundary of LVSP. Extending Rancho Sahuarita Boulevard from the western property boundary across the site to connect with La Villita Road will provide a future access point for the RSSP and enhance connectivity for the Town as a whole.

3. Valle Verde Del Norte

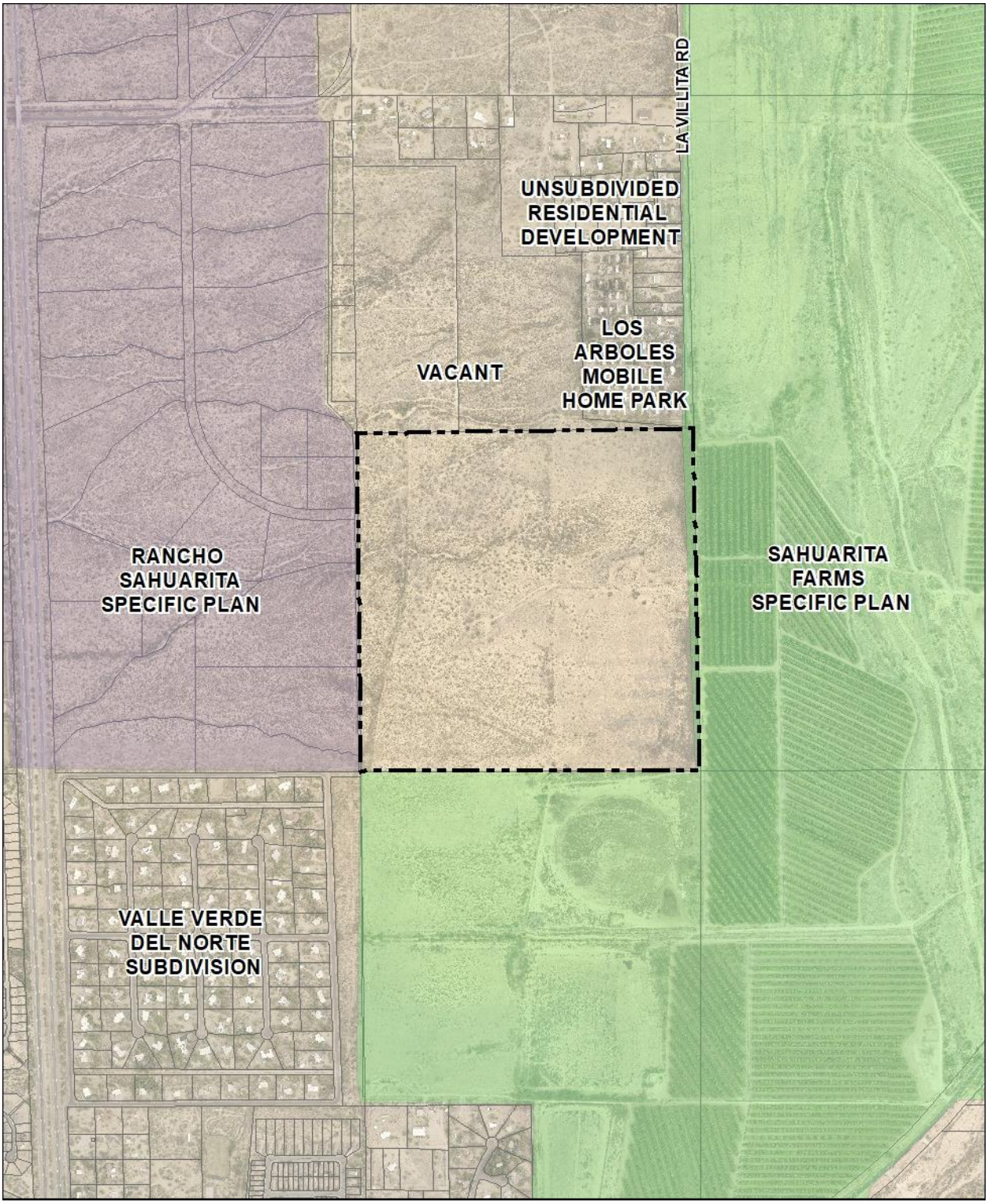
The Valle Verde Del Norte residential subdivision is located southwest of the property. This subdivision consists of detached single-family homes, the nearest of which is over 400 feet from the southwest property corner. Due to existing drainage patterns on the subject property, that home would be a minimum of 500 feet from the closest proposed home in LVSP. Valle Verde Del Norte homes are set back from the street, and many are surrounded by mature trees. The approximately 165-foot to 245-foot wide parcel of land owned by the same owners of LVSP located between Valle Verde Del Norte and the SFSP will remain to help separate existing and future uses.

The intent of La Villita Specific Plan is to create the potential for a mix of uses that are compatible with and beneficial to the area despite the current vehicular access limitations. Interconnected trail networks amongst the area's three master-planned communities will promote outdoor recreation, leisure, and travel in the form of hiking, biking, running, and walking. New commercial development allowed in LVSP along La Villita Road will also serve existing residents in Valle Verde Del Norte via the future trail network in the area.

4. Los Arboles Mobile Home Park and Vacant Land

To the north lies the Los Arboles Mobile Home Park, vacant land and unsubdivided residential development. It is assumed the improvement associated with the development of LVSP will benefit properties to the north by providing better vehicular and pedestrian connectivity as well as major utility infrastructure improvements for other properties to take advantage of (**see Exhibit I.C.1: Sahuarita Square District Map**).

Exhibit I.C.1: Adjoining Land Use Map



II. Land Use Plan

II. LAND USE PLAN

A. PLAN OVERVIEW

La Villita Specific Plan (LVSP) presents a comprehensive vision for the development of an approximately 162-acre property located west of La Villita Road approximately one and half miles south of Sahuarita Road. The property will consist of two distinct zoning categories, Village Neighborhood and Village Center, that allow for a mix of uses, focusing on residential and small-scale commercial. Utilizing the basic parameters of the R-5 (Multiple Residence)and B-1 (Local Business) zones, LVSP provides development regulations and design guidelines that will help facilitate an effective mix of housing and commercial opportunities. In instances where LVSP is silent in providing development standards or regulations, the provisions of the Town Code for the R-5 and B-1 zones, and other relevant Town standards shall apply. Where LVSP varies from the Town Code or other relevant Town standards, the Specific Plan shall apply.

B. LAND USE PLAN

The residential uses within LVSP may consist of a variety of market-rate housing options including traditional detached single-family homes and attached single-family homes on varying lot sizes, as well as multi-family residential options. Densities of the residential neighborhoods may vary, as will the size and character of the housing products offered. Residential densities will be reflective of the minimum density suggested by the Sahuarita Square District but may be slightly lower due to drainage constraints. If greater density can be achieved despite onsite drainage constraints, a cap of 1,200 total residential units is proposed for LVSP.

Proposed nonresidential uses will complement new and existing residential neighborhoods by providing residents with local services and retail opportunities that satisfy daily needs and reduce current vehicle miles traveled to obtain such services. The property's locale in a relatively undeveloped portion of Sahuarita precipitates the need for allowing smaller scale commercial to serve residents. LVSP will feature a network of trails and pedestrian paths to help provide direct connections to nonresidential uses in and around the Specific Plan area, and to encourage outdoor recreation, leisure, and the use of alternative forms of transportation to the automobile. In doing so, the property will tie seamlessly into the surrounding area as future developments that include new walking, biking, and vehicle connections come online.

LVSP will provide flexibility that is responsive to the ever-changing land development market to allow the developer to adapt construction plans to specific market conditions. The following provides a brief description of the proposed zoning categories and their respective Sub Areas, and further provides regulation relating to uses, physical character and intensity of development on the property.

1. Specific Plan Sub Areas

As shown in *Exhibit II.B.1: Land Use Plan*, the entire site is broken up into six Sub Areas: A1, A2, A3, B1, B2, and B3 to further define where greater densities and certain uses may be located. The zoning categories and Sub Areas provide the flexibility to develop residential in conjunction with other complementary uses throughout the site except for as noted below. In addition to detached single-family homes, other potential residential options could include townhomes, apartments, or condos. In addition to residential uses, the plan also provides flexibility to accommodate complementary, small-scale neighborhood commercial and civic uses such as schools, religious uses, offices, yoga studios, coffee shops, drug stores, restaurants, and other neighborhood services.

Commercial uses are only allowed in the Village Center Sub Areas A1, A2, and A3 as shown in *Exhibit II.B.1: Land Use Plan*, but other nonresidential development such as schools and religious uses are encouraged further west into LVSP. The residential density allowed in each Sub Area reflects the Sahuarita Square District vision for a mix of higher density residential development types, while respecting existing and planned residential development to the north, south and east.

LVSP allows for greater residential density up to 30 dwelling units per acre (du/acre) and neighborhood commercial adjacent to or within proximity to La Villita Road. Sub Areas A2 and B2 are envisioned as the core of LVSP, encircled by major collector roadways and La Villita Road, and offering excellent vehicular and pedestrian connectivity. A minimum density of 8 du/acre is proposed within Village Center Sub Area A2 to encourage a compatible mix of housing and commercial development, and A2 and B2 both allow up to 30 du/acre. Higher density housing types and neighborhood commercial in Sub Areas A1, A2, and A3 will not negatively impact neighboring properties given their location within the overall LVSP property, and clustering commercial uses close to La Villita Road will provide everyone in the area convenient access to new commercial offerings.

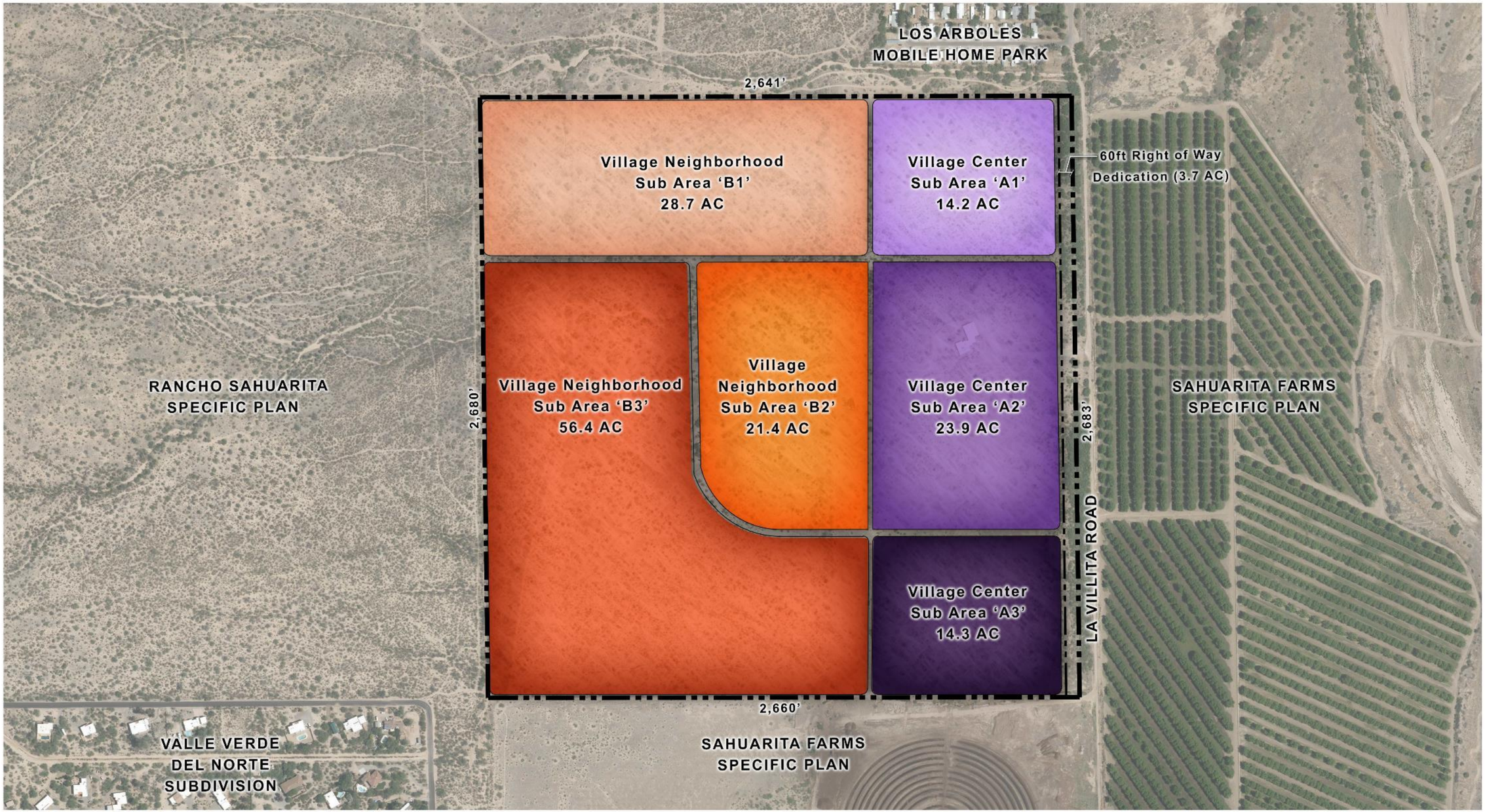
Slightly lower residential densities expected in Village Neighborhood Sub Area B3 ensure compatibility with the existing Valle Verde Del Norte subdivision to the southwest as well as planned residential in the Rancho Sahuarita Specific Plan. However, a mix of housing types and sizes is still encouraged in Sub Area B3 to create a variety of housing options and price points. Development and design standards described in this document will govern build-out of the overall site. The type, location and final design of specific uses will be determined at the development plan/platting stage.

Table II.B.1: Residential Development Targets

Sub Area	Acreage	Equivalent Town of Sahuarita Zone	Allowable Density	Target Number of Dwelling Units
Village Center A1	14.2	B-1	Min. 6 RAC Max. 25 RAC	56
Village Center A2	23.9		Min. 8 RAC Max. 30 RAC	189
Village Center A3	14.3		Min. 6 RAC Max. 25 RAC	53
Village Neighborhood B1	28.7	R-5	Min. 6 RAC Max. 25 RAC	326
Village Neighborhood B2	21.4		Min. 6 RAC Max. 30 RAC	276
Village Neighborhood B3	56.4		Min. 6 RAC Max. 18 RAC	300

Note: Sub Areas total 158.9 acres and the 60-foot La Villita Road right-of-way dedication accounts for the other 3.7 acres up to 162.6 total acres.

Exhibit II.B.1: Land Use Plan



LA VILLITA

0' 200' 400'
SCALE: 1"-400-0"
NORTH

C. TRANSPORTATION

The subject property is located approximately one- and one-half miles south of Sahuarita Road along the west side of the proposed future extension of La Villita Road. Currently, it is an undeveloped parcel. It is noted that the Sahuarita Square Catalyst Project being developed by the Town will be constructed around year 2028. The La Villita Road will be also extended up to Nogales highway at S. Calle Valle Verde in the same horizon. It is the understanding that the La Villita Road will remain a two-lane-two-way roadway with a posted speed limit of 45 miles per hour (mph).

Per the Town's suggestions, 2020 Quality/level of Service Handbook published by the Florida Department of Transportation, dated June 2020 was utilized and the capacity of La Villita Road was determined as 15,309 vehicles per day (vpd). Furthermore, based on the directions from the Town of Sahuarita, a combination of potential land uses was identified under allowable uses mentioned in the Planning and Zoning standards. Respective square footage for the identified land uses were also determined making sure that the total expected AADT does not exceed the capacity of La Villita Road. The analyses resulted in the following land uses and square footage at the subject property:

1. Single - Family Detached Housing – 800 units
2. Multi- Family Housing (Mid Rise) – 400 units
3. Governmental Services - 6,000 square feet
4. Fast Food Restaurants - 5,000 square feet
5. Coffee/Donut Shop - 2,000 square feet
6. Convenience Market - 2,500 square feet
7. General Retail - 3,500 square feet
8. Personal Services - 4,500 sq. ft.
9. Car Wash - 5 stalls, (approximately – 5,000 sq. ft.)

It is anticipated that the development would be constructed and opened in three different phases with a build out year of 2033 (10 years), although actual build-out could occur much earlier depending upon market conditions. The development anticipated in each phase is shown below and represents total development within LVSP up to that point. The number of units listed in each successive phase after Phase 1 is not cumulative.

1. Phase 1 - 2023:
    a. Single - Family Detached Housing – 300 units
2. Phase 2 - 2028:
    a. Single - Family Detached Housing – 800 units (300 Phase 1 units + 500 additional units)
    b. Multi- Family Housing (Mid Rise) – 200 units
3. Build Out Year 2033:
    a. Single - Family Detached Housing – 800 units
    b. Multi- Family Housing (Mid Rise) – 400 units (200 Phase 2 units + 200 additional units)
    c. All commercial developments:
        i. Governmental Services - 6,000 square feet
        ii. Fast Food Restaurants - 5,000 square feet

iii. Coffee/Donut Shop - 2,000 square feet

iv. Convenience Market - 2,500 square feet

v. General Retail - 3,500 sq. ft.

vi. Personal Services – 4,500 sq. ft. (all group hair salon – 2,000 sq. ft. + Spa – 2,500 sq. ft.)

vii. Car Wash - 5 stalls, (approximately - 5,000 sq. ft.)

This traffic analysis describes the expected trips generated from the proposed development, analyzes the operational performance of Sahuarita Road and La Villita Road intersection, and analyzes and identifies the necessary configurations of the proposed roadways and intersections. The following guidelines and manuals were used to complete this section:

1. A Policy on Geometric Design of Highways and Streets published by American Association of State Highway and Transportation Officials (AASHTO)
2. Manual on Uniform Traffic Control Devices (MUTCD)
3. Institute of Transportation Engineers (ITE)
4. Pima County Department of Transportation (PCDOT)
5. City of Tucson Department of Transportation (TDOT) Traffic Engineering Division Pavement Marking Standards
6. 2020 Quality/level of Service Handbook published by the Florida Department of Transportation

1. Trip Generation and Distribution

The ITE Trip Generation Manual 10th edition was used to estimate the expected average number of trips that would be generated from the proposed development site. It is anticipated that in the build out year, the subject property can generate approximately 16,783 trips per day with 1,343 trips in the morning peak hour, and 1,447 trips in the evening peak hours. The following table shows the detailed trip generations.

Table II.C.1: La Villita Trip Generation

Time Horizon	LAND USE, CODE & UNIT	SIZE	DAILY RATE or EQUATION	ADT	AM PEAK					PM PEAK				
					RATE or EQUATION	IN/OUT (%)	VOLUME			RATE or EQUATION	IN/OUT (%)	VOLUME		
							IN	OUT	TOTAL			IN	OUT	TOTAL
Phase 1 - 2023	Single - Family Detached Housing Land Use Code - 210 Units - Dwelling Units	300 units	Ln (T) = 0.92*Ln(X) + 2.71	2,857	T = 0.71(X) + 4.80	25/75	54	163	218	Ln(T) = 0.96 Ln(X) + 0.20	63/37	184	108	292
	Total			2,857			54	163	218			184	108	292
Phase 2 - 2028	Single - Family Detached Housing Land Use Code - 210 Units - Dwelling Units	800 units	Ln (T) = 0.92*Ln(X) + 2.71	7,043	T = 0.71(X) + 4.80	25/75	143	430	573	Ln(T) = 0.96 Ln(X) + 0.20	63/37	471	277	748
	Multi- Family Housing (Mid Rise) Land Use Code - 221 Units - Dwelling Units	200 units	T = 5.45 (X) - 1.75	1,088	Ln(T) = 0.98 Ln(X) - 0.98	26/74	18	50	68	Ln(T) = 0.96 Ln(X) - 0.63	61/39	53	34	86
	Total			8,132			161	480	640			524	310	834

Table II.C.1: La Villita Trip Generation (cont'd.)

Time Horizon	LAND USE, CODE & UNIT	SIZE	DAILY RATE or EQUATION	ADT	AM PEAK					PM PEAK				
					RATE or EQUATION	IN/OUT (%)	VOLUME			RATE or EQUATION	IN/OUT (%)	VOLUME		
							IN	OUT	TOTAL			IN	OUT	TOTAL
Build out - 2033	Single - Family Detached Housing Land Use Code -210 Units - Dwelling Units	800 units	Ln (T) = 0.92*Ln(X) + 2.71	7,043	T = 0.71(X) +4.80	25/75	143	430	573	Ln(T) = 0.96 Ln(X) + 0.20	63/37	471	277	748
	Multi- Family Housing (Mid Rise) Land Use Code -221 Units - Dwelling Units	400 units	T = 5.45(X) - 1.75	2,178	Ln(T) = 0.98 Ln(X) - 0.98	26/74	35	99	133	Ln(T) = 0.96 Ln(X) - 0.63	61/39	102	65	168
	Governmental Services (United States Post office) Land Use Code - 732 Units - SF	6,000 SF	103.94	624	8.28	52/48	26	24	50	11.21	51/49	34	33	67
	Fast Food Restaurants Land Use Code - 934 Units - SF	5,000 SF	470.95	2,355	40.19	51/49	102	98	201	32.67	52/48	85	78	163
	Coffee/Donut Shop Land Use Code - 937 Units - SF	2,000 SF	820.38	1,641	88.99	51/49	91	87	178	43.38	50/50	43	43	87
	Convenience Market Land Use Code - 851 Units - SF	2,500 SF	762.28	1,906	62.54	50/50	78	78	156	49.11	51/49	63	60	123
	General Retail Land Use Code -815 Units - SF	3,500 SF	53.12	186	1.17	69/31	3	1	4	4.83	50/50	8	8	17
	Personal Services Land Use ode - 918 Units - SF	4,500 SF	15.56*	70	1.21	50/50**	3	3	5	1.45	17/83	1	5	7
	Car Wash (Car Wash Center) Land Use Code - 949 Units - Wash Stalls	5,000 SF	156.2	781	8.6	63/37	27	16	43	13.6	49/51	33	35	68
	Total			16,783			508	836	1,343			842	606	1,447

Notes:

1) *The daily trip rate is not available in the ITE Trip Generation Manual. The manual only shows trip rates for AM and PM peak hours. It has been assumed that 10% trips take place in PM peak hour and then the daily trip rate was back-calculated.

2) ** No distribution is available in teh ITE Trup Generation Manual, and thus a 50/50 split is assumed.

3) Computer software "Excel" was used to estimate the total trip generations from the ITE trip rates and thus there could be rounding inconsistencies.

2. Sahuarita Road and La Villita Road Intersection Operational Analysis

In August 2019, the traffic volume at Sahuarita Road and La Villita Road intersection was collected and an adjustment factor of 1.03 (based on Arizona Department of Transportation Highway Performance Measure System) has been applied to adjust the August 2019 traffic volumes to capture the presence of the winter visitors/seasonal residents in the study area. Utilizing the historical traffic volumes from Pima Association of Governments (PAG) Transportation Data Management System (TDMS), and land use patterns in the study vicinity, an annual traffic increase of 2.0% was established for the background non-site related traffic along the south leg of La Villita Road and both legs on Sahuarita Road. The area surrounding north leg of La Villita Road is close to saturation with minimal opportunity for further developments, and thus an annual traffic growth factor of 1.0% was established for north leg related traffic.

Based on the directions from the Town of Sahuarita, the Sahuarita Road and La Villita Road intersection was analyzed for both morning and afternoon peak hours for existing i.e. 2019, Phase 1 opening i.e. 2023, Phase 2 opening i.e. 2028, Buildout i.e. 2033, 5-year horizon i.e. 2038, and 10 year horizon i.e. 2043 conditions. The Sahuarita Road and La Villita Road intersection is expected to operate at level-of-service (LOS) D or better during both AM and PM peak hour conditions as it currently exists today, without and with LVSP site traffic in all opening years i.e. 2023, 2028, 2033, and 5-year and 10-year horizons (refer to Table C.2 for detailed LOS information). This is an acceptable level of service.

Table II.C.2: Level-of-Service Analysis for the Project Intersection

INT. #	INTERSECTION		2019 - EXISTING BACKGROUND		2023 BACKGROUND		2023 COMBINED: BACKGROUND + SITE		2028 BACKGROUND		2028 COMBINED: BACKGROUND + SITE	
			DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS
1	La Villita Rd and Sahuarita Rd											
	AM peak	Overall	21.0	C	21.6	C	21.2	C	22.2	C	21.7	C
		EB	22.0	C	21.6	C	22.2	C	23.2	C	23.3	C
		WB	33.4	C	33.2	C	32.8	C	37.5	D	36.7	D
		NB	9.4	A	9.7	A	11.7	B	12.1	B	14.3	B
		SB	13.4	B	15.1	B	15.4	B	14.4	B	14.7	B
	PM peak	Overall	17.6	B	18.1	B	18.0	B	17.6	B	18.5	B
		EB	15.9	B	16.6	B	17.0	B	16.1	B	17.8	B
		WB	22.9	C	23.0	C	22.2	C	22.6	C	23.6	C
		NB	10.4	B	10.7	B	13.7	B	16.5	B	16.9	B
		SB	13.1	B	13.6	B	14.4	B	13.4	B	14.1	B

INT. #	INTERSECTION		2033 BACKGROUND		2033 COMBINED: BACKGROUND + SITE		2038 BACKGROUND		2038 COMBINED: BACKGROUND + SITE		2043 BACKGROUND		2043 COMBINED: BACKGROUND + SITE	
			DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS
1	La Villita Rd and Sahuarita Rd													
	AM peak	Overall	22.7	C	22.8	C	26.4	C	25.9	C	30.6	C	29.8	C
		EB	21.2	C	21.4	C	26.2	C	25.5	C	30.2	C	30.0	C
		WB	35.8	D	36.1	D	40.0	D	38.3	D	46.7	D	44.8	D
		NB	13.0	B	19.4	B	12.6	B	20.2	C	12.6	B	20.9	C
		SB	17.7	B	17.7	B	20.3	C	21.2	C	23.3	C	24.3	C
	PM peak	Overall	18.0	B	21.8	C	18.2	B	21.9	C	19.0	B	23.9	C
		EB	16.1	B	23.7	C	15.2	B	22.8	C	16.1	B	24.7	C
		WB	22.6	C	26.5	C	24.0	C	26.9	C	24.7	C	29.5	C
		NB	17.5	B	19.6	B	17.3	B	19.5	B	18.6	B	21.7	C
		SB	15.1	B	13.9	B	15.4	B	14.8	B	16.1	B	15.2	B

In 2019, the existing southbound right-turn volumes are very heavy in the morning with approx. 185 feet of queue length; southbound left-turn also experiences long queues in the morning. The right and left-turn vehicles spill over on to the through lanes on the north leg of La Villita (i.e. southbound) in the morning. Existing eastbound left-turn started experiencing long queues; occasionally the left-turn spills over on to the through lanes.

The intersection situation gets more crowded over the years, and in 2043 (i.e. 10 year horizon), the left turn lanes on eastbound and northbound approaches, and right -turn lane on southbound approach are expected to experience significantly larger queue lengths. Our study shows the critical movements are southbound right- and left-turn movements on the north leg in the AM peak hours, and eastbound left-turn movement in the PM peak hours. These movements are created by the residents living north of the Sahuarita Road/ La Villita Road intersection going to the schools located west of the Sahuarita Road/ La Villita Road intersection. The intersection would operate at an acceptable Level of Service, which is D or better, in 2043 such that both without and with LVSP project traffic, the queuing would be an important element for the Town to investigate for safety reasons.

3. Adjacent Future Transportation Network

The future extension of La Villita Road is unpaved along the LVSP project in the study area. Based on the "Sahuarita Farms Specific Plan" adopted on October 1, 2015, La Villita Road is a proposed north-south aligned 4-lane divided collector that connects with Sahuarita Road on the north end and Nogales Highway at S. Calle Valle on the south end. Based on the discussion with the Town, it is found that the La Villita Road will be connected to Nogales Highway in 2028, and the Catalyst project consisting of a community park and athletic area will be constructed at the same time. El Toro Road would be an east-west aligned 6+ lane regional corridor. Average daily traffic (ADT) data from Pima Association of Governments (PAG) Transportation Data Management System (TDMS) was obtained as follows:

a. La Villita North Leg - 9,665 vehicles per day (vpd) (year 2019)
b. La Villita South leg – 1,788 vpd (year 2019)
c. Sahuarita east Leg - 13,303 vpd (year 2019)
d. Sahuarita west Leg - approximately 20,000 vpd (estimated for year 2020)
e. La Villita north of existing mobile homes – 888 vpd (year 2002)
f. Twin Buttes - 936 vpd (year 2019)
g. El Toro west Leg - 952 vpd (year 2019)
h. Nogales Highway - 11,428 vpd (year 2019) (south of Nogales Highway/Continental Road intersection), 13,064 (year 2019) (between Nogales Highway/Continental Road and Sahuarita Road/Nogales Highway intersections)

4. Recommended On-Site Transportation Improvements

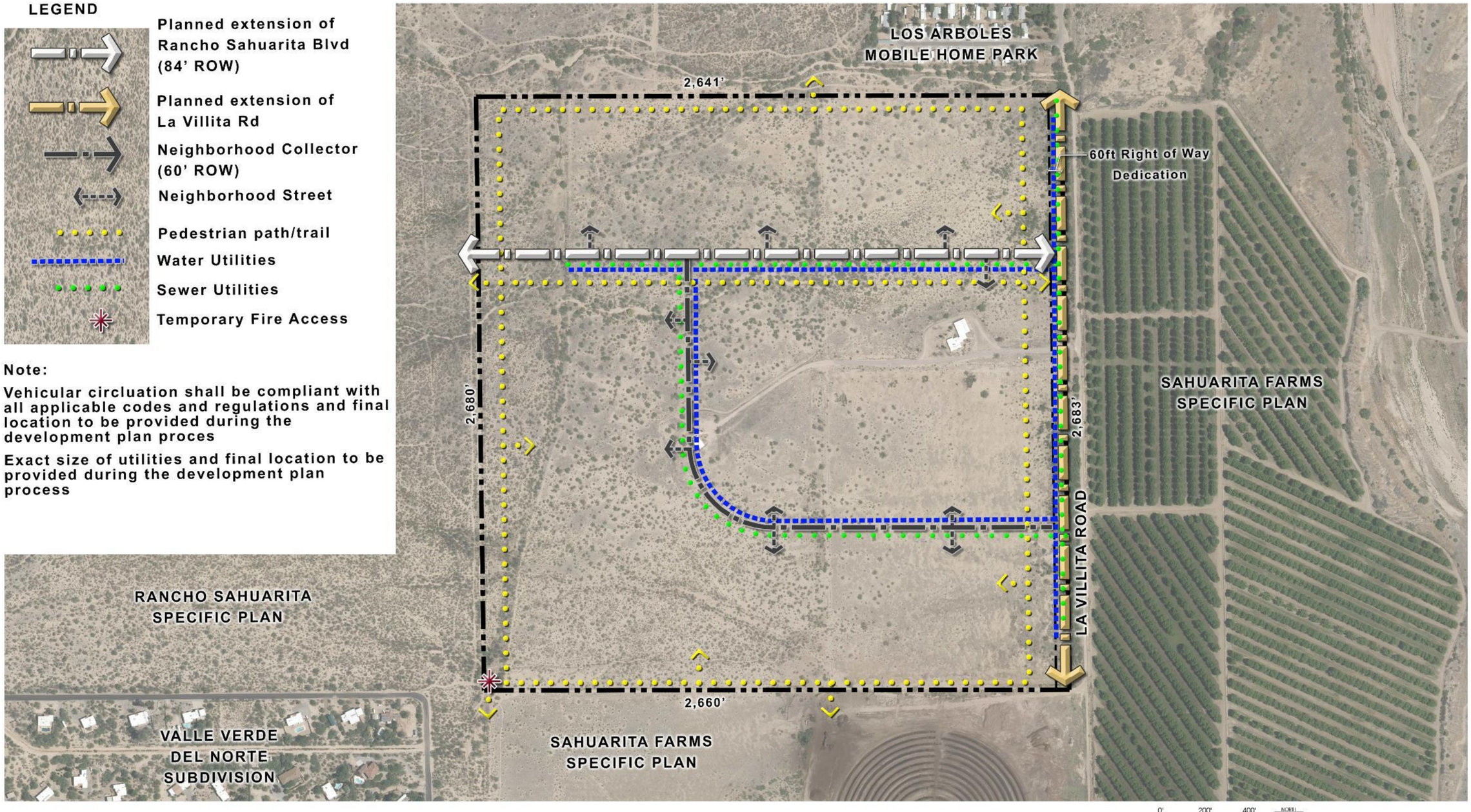
The development site has three accesses to the roadway network: an 84-foot public right-of-way (ROW) collector roadway connecting the site with La Villita Road on the east end and connecting to Rancho Sahuarita Boulevard on the west end, and a 60-foot public ROW collector roadway connecting the site with La Villita Road (**see Exhibit II.C.1: Circulation and Utilities Concept and Exhibit II.C.2: Street Cross Sections**). In addition to the site traffic, the 84 feet ROW road will experience cut-through traffic as it bridges the gap between Rancho Sahuarita Boulevard (at the east/north) and La Villita Road (at the east). Based on traffic engineering knowledge, to carry the anticipated volumes, two-lane two-way (one lane each direction) sections will be needed for both roadways. Due to the nature of traffic on the 84-foot public ROW road, installation of a two-way-left-turn-lane at the center is recommended which would facilitate the left-turning vehicles safely. These two access locations at La Villita Road are more approximately 700 feet apart which maintains the minimum spacing requirements by the City of Tucson. It is suggested that the La Villita Road section in front of the subject property consist of an interim Two-Lane-Two-Way (one lane each direction) section to be utilized instead of the ultimate curbed median until more similar new developments are built along the east side

of La Villita Road in the future. The interim roadway section will include installing right turn lanes at the intersections.

The intersections of the 84-foot ROW and 60-foot ROW roadways with La Villita Road meet the MUTCD traffic signal warrants. It is recommended that detailed signal and turn lane analyses be performed when plats are submitted to the Town. While the intersections do not meet signal warrants, STOP signs are recommended. Left-turn deceleration lanes (for the northbound traffic to the subject property) at the La Villita Road access points for the proposed 84-foot ROW and 60-footROW roadways require 120-foot turn bays with 150 feet of storage. Right-turn deceleration lanes (for the southbound traffic to the subject property) at the La Villita Road access points for the proposed 84-foot ROW and 60-foot ROW roadways require a 15:1 turn bay taper with 150 feet of storage.

It is strongly recommended that no objects higher than 3 feet are installed in the AASHTO recommended sight visibility triangle at the access point intersections. It is recommended that the on-site pedestrian crossings and sidewalks follow the Americans with Disabilities Act (ADA) ensuring full accessibility to all types of pedestrians. Appropriate STOP signs MUST be placed at the on-site minor roadways.

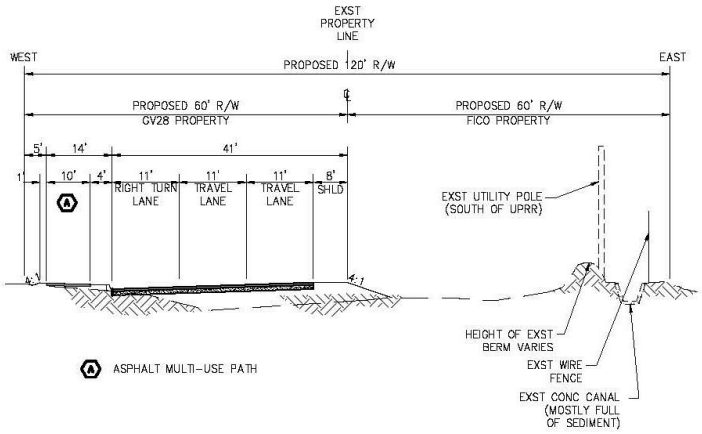
Exhibit II.C.1: Circulation and Utilities Concept



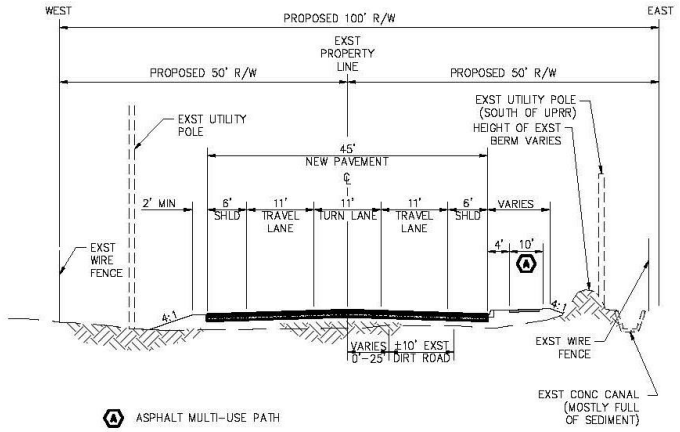
LA VILLITA

Exhibit II.C.2: Street Cross Sections

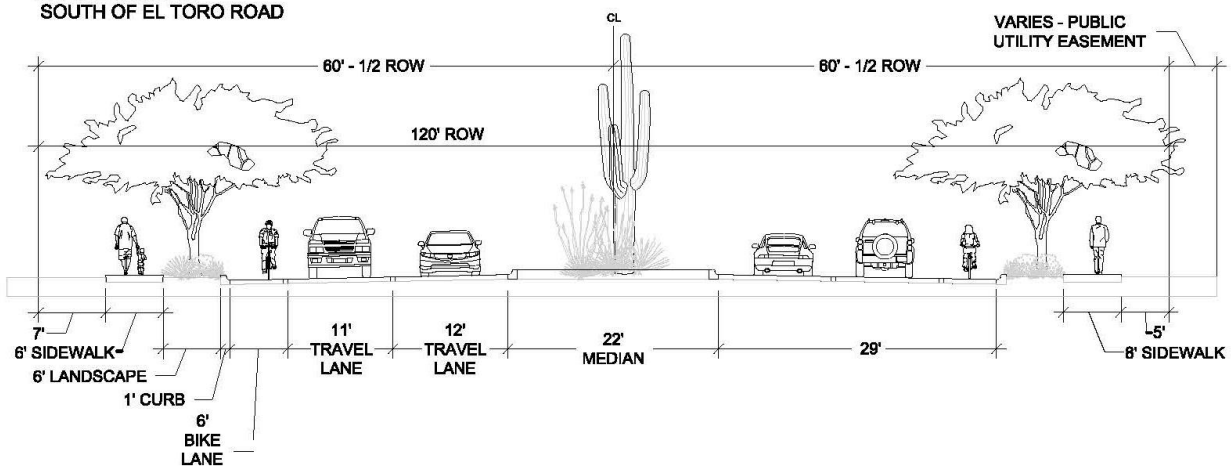
INTERIM LA VILLITA ROAD WITH RIGHT TURN LANE - 120' ROW
SOUTH OF EL TORO ROAD



LA VILLITA ROAD - 100' ROW
SAHUARITA ROAD TO EL TORO ROAD



LA VILLITA ROAD
SOUTH OF EL TORO ROAD



RICK ENGINEERING COMPANY
3945 EAST FORT LOWELL ROAD - SUITE 111
TUCSON, AZ 85712
520-795-1000

PAGE 1 OF 2

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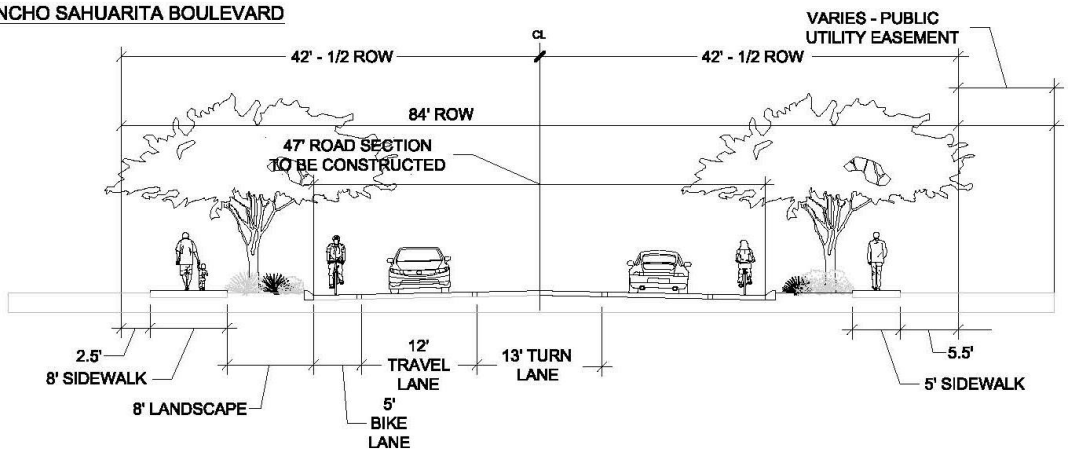
09-Mar-21

Exhibit II.C.2: Street Cross Sections Cont'd.



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TUCSON, AZ 85712
520-795-1000

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09-Mar-21

D. INFRASTRUCTURE AND PUBLIC FACILITIES

1. Sanitary Sewage Conveyance

The undeveloped site naturally slopes to the east, with the lowest point of the site located at the northeast corner. Consequently, it is proposed that all generated onsite wastewater flows be conveyed by gravity in 8" and 12" pipes towards the project's northeast boundary corner at which point it will connect to the ultimate gravity outfall 18-inch sewer pipe to be designed along La Villita Road. The proposed 18-inch pipe in La Villita Road is based on the Sahuarita Major Sewerage Service Area Sewer Basin Study prepared by ICON Consultants USA in July 1995. During the platting phase of the project an updated Sewer Basin Study will be completed to final the sewerage system design. This will allow connection to the existing 21-inch sewer pipe at the intersection of La Villita Road and Sahuarita Road intersection and allow for future connection to the Sahuarita Wastewater Treatment Facility (**see Exhibit II.C.1: Circulation and Utilities Concept and Exhibit II.D.1: Proposed Offsite Utilities**).

2. Wastewater Treatment

With the mix of land uses and densities within LVSP, it is estimated that at build out, the projected average daily flows would be in the range of 0.267 million gallons per day (MGD). This estimated value does not indicate an actual proposed development plan for the property. Therefore, a Sewer Master Plan study will be prepared during the Development Plan or Platting stage to determine the required amount of additional treatment and conveyance capacity will be needed in the downstream sanitary sewage system. This project will be served by the Town of Sahuarita Wastewater Utility. Refer to the letter from Sahuarita Public Works**, Exhibit II.I.1: Wastewater Capacity Response Letter.**

3. Solid Waste Disposal

All required solid waste and recycle materials collection and storage shall be located and screened, to allow for safe access and maneuverability within the development. A few private sanitation service providers may be contracted to serve the site with comprehensive trash and solid waste removal, recycling, and environmentally safe waste management services.

4. Water Utility

The proposed development lies within the vicinity of Farmers Water Company service area boundaries. Before the approval of the first Development Plan or Plat, the developer shall enter into an agreement with the Water Utility designated by the State of Arizona Department of Water Resources as having an assured water supply. The developer will provide the Town with a Water Service Agreement that establishes assured water supply to the property. Farmers Water recently completed its infrastructure study to determine the needed upgrades to the water system and extension of transmission mains to service a portion of the Sahuarita Square Overlay District area. The La Villita Corridor Master Water Analysis for GV-28 and Sahuarita Town Park was completed in April 2020. The analysis identified three options and Options 2 and 3 are considered the most cost-effective choice to serve the properties along La Villita Road. The results of the modeling indicate that a new well, booster pumps, storage and hydropneumatic tanks; and a 16-inch water line are needed for the water system improvements to serve the existing and future water customers (**see Exhibit II.C.1: Circulation and Utilities Concept and Exhibit II.D.1: Proposed Offsite Utilities**).

5. Private-Public Utilities

Electricity, natural gas, telecommunications and cable services will be extended to the project site at the time of development through agreements with individual utility companies. The individual Utility Companies were contacted, and they provided their utility base maps. During the Platting and Development Phase of the project the Developer will work with the Utility companies for them to determine their infrastructure upgrades, access, and easement requirements.

See Exhibit II.C.1: Circulation and Utilities Concept and Exhibit II.D.1: Proposed Offsite Utilities.

a. Electric

The site lies within the Tucson Electric Power Company (TEP) Service area. An Arizona Electric Cooperative (AEPCO) transmission line is located north of LVSP property and is not in conflict with their facilities.

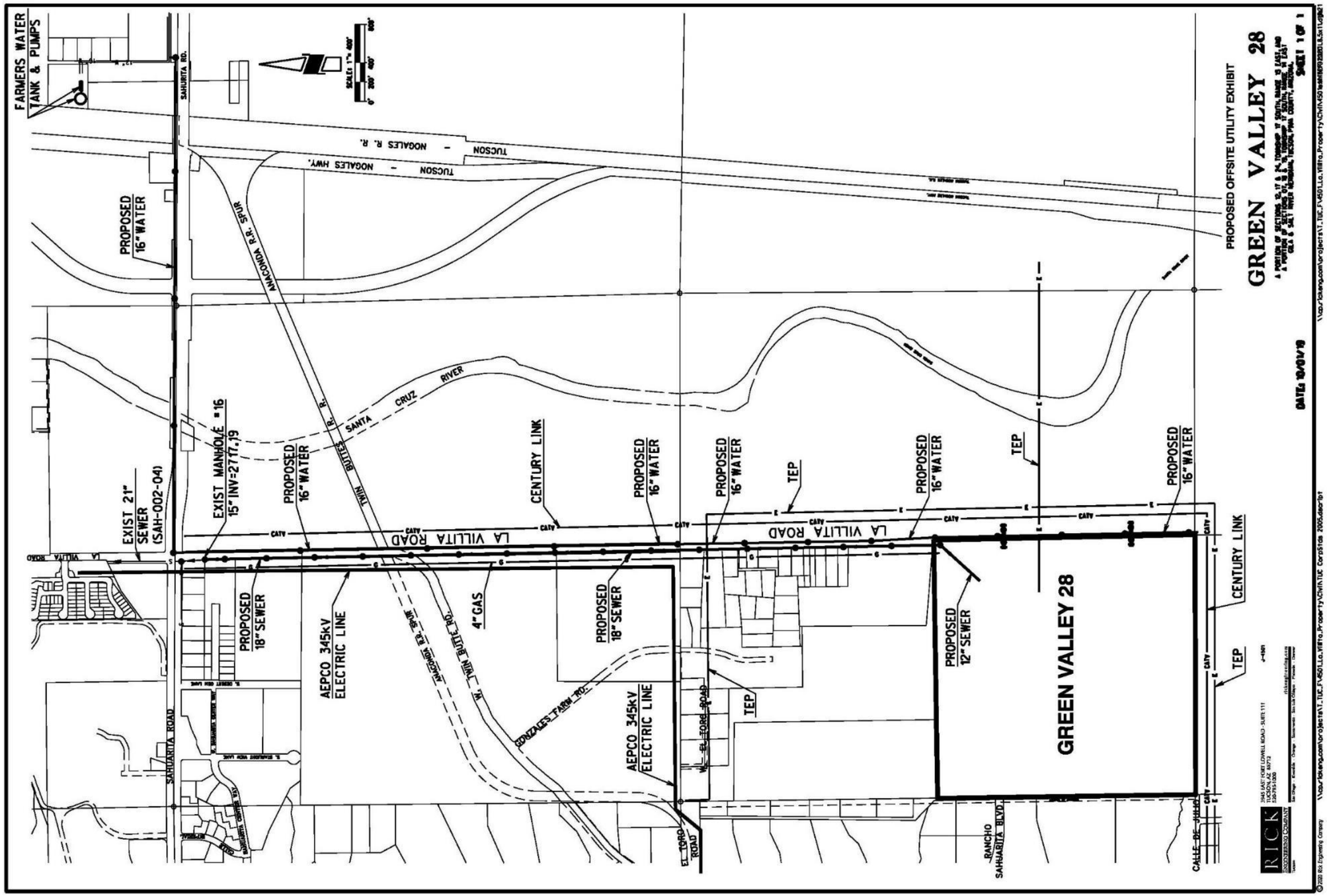
b. Communication

CenturyLink, Comcast and Cox Communications all provide service within the surrounding area.

c. Natural Gas

The site lies within the Southwest Gas Service area.

Exhibit II.D.1: Proposed Offsite Utilities



E. HYDROLOGY

The offsite braided washes are known for rapid and frequent peak flow variations. As a result, peak flow volumes through the existing on-site berm breaches and along the berm will not be consistent. The manmade earthen berm has no structural integrity and should not be used for a safe flood control solution. The berm must be removed and replaced by an engineered drainage structure to control inconsistent flow volumes and safely protect downstream development from flooding. Existing channels conveying easterly across the site do not have adequate capacity to contain the flows associated with larger storms resulting in sheet flooding over the eastern half of the site.

LVSP proposes collection of offsite regulatory flows and channelization of offsite and onsite peak flows to ensure safe conveyance through the site. Proposed channels will be lined or will provide adequate scour protection to eliminate erosion hazard setbacks. Sediment transport analyses will be performed to ensure sediment can be transported through the proposed drainage system such that it closely resembles the existing condition.

The post development discharge rates exiting along the east property boundary will be approximately equal to the existing condition discharge rates. Onsite detention will be provided to mitigate potential increases in peak flows associated with site development.

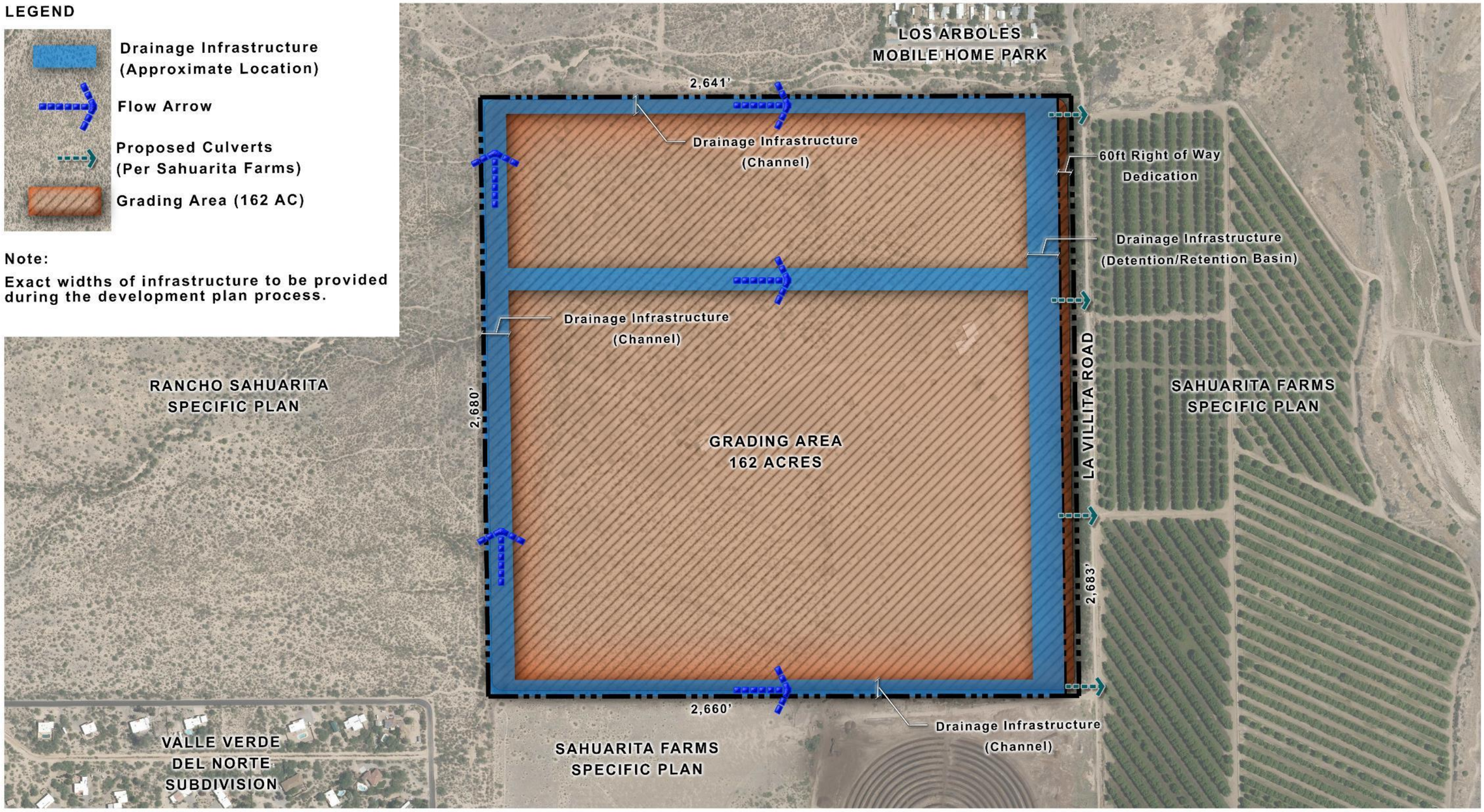
The engineering features that will be used to mitigate potential impacts to the site development include bank protection, cut-off walls to control channel degradation, roadway drainage culverts where needed to facilitate all-weather access and fill to elevate lots above the 100-year flood elevation. The engineering features that will be used to mitigate potential impacts to downstream property will include onsite detention basins to prevent significant increases in peak flow rates. Increases in flow velocities will be managed through appropriately sized scour protection and/or drop structures.

Riparian habitat measures will be incorporated into the proposed channels and detention basins. Mitigation is located adjacent to, or within, channel and basin slopes. Mitigation vegetation has been accounted for within engineering features and will have no adverse hydrologic or hydraulic effects.

The subdivision and development plan design will conform to known basin management policies and with Town of Sahuarita floodplain management policies and regulations. Primary amongst them are regulations related to development within floodplain areas, erosion hazard mitigation and onsite detention requirements.

See Exhibit II.E.1: Drainage and Grading Concept.

Exhibit II.E.1: Drainage and Grading Concept



F. GRADING CONCEPT

The site is composed of moderately disturbed, primarily vacant land. The location of the site is adjacent to agricultural and single-family residential land uses which makes residential homes an appropriate use for this parcel. There were two existing single-family residential homes that have been removed. Naturally occurring 15% or greater slopes are not present on the site. The majority of the site has been previously disturbed and used for agricultural, manmade berms and residential home sites.

Cut and fill on the site may exceed 5 feet in limited areas and will comply with applicable regulations. The site will have the necessary mitigation measures to protect against soil erosion. Areas of drainage will incorporate concrete and riprap erosion control measures.

As the site will be mass-graded, the majority of the site will be graded for roadways, building pads, drainage, parks and open space. All grading and revegetation will follow the adopted grading and landscape ordinances.

There may be some areas with more than five feet of cut or fill. Around the north, south, and west sides of the project, at existing washes, the proposed home sites will be elevated. The minimum elevation at these areas will be dictated by the drainage and roadway design requirements. The depth of cut in the basins will be kept to a minimum, depending on the final detention/retention design for the project.

See Exhibit II.E.1: Drainage and Grading Concept.

G. CONSERVATION

The presence of high-quality vegetation, unique plants, and desert fauna are important aspects of the desert Southwest culture and way of life that will be preserved to the greatest extent possible and mitigated for when needed. La Villita Specific Plan provides conservation guidelines created for the unique site and existing conditions.

1. Riparian Habitat

Riparian habitat disturbance will be minimized through the development process and limited to utility crossings, roadways, drainage improvements, community development, facilities that benefit the community and avoiding situations that question the general health, safety, and welfare of future users.

Approximately 8.6 acres of mapped Xeroriparian 'C' habitat exists on-site. The riparian habitat has been inventoried via the individual plant inventory method specified on the La Villita Riparian Habitat Conservation Plan (See Appendix B). The inventory list shall be the basis for all future mitigation. All mitigation techniques as outlined in the Town of Sahuarita Riparian Habitat Mitigation Standards and Implementation Guidelines are permitted within LVSP.

2. Native Plants

The use of native plants is encouraged in LVSP. Existing native vegetation such as Barrel Cacti and Saguaro free of all health issues and capable of surviving the transplanting process shall be transplanted on-site and used in the final landscape plan. All other plants listed in the Town of Sahuarita approved plant list are allowed.

H. LANDSCAPE

La Villita Specific Plan envisions a landscape theme that creates a unique sense of place while complementing surrounding existing/planned development and providing for the comfort and enjoyment of users. The main objectives of the landscape are as follows:

a. Unify and enhance the overall character of the Specific Plan area,
b. Create visual interest and appeal,
c. Provide buffers between differing uses or activities,
d. Provide shade for people and activities throughout the Specific Plan area, and
e. Reduce water use through plant selection and irrigation techniques.

The principal design elements used to convey the landscape character of LVSP include:

3. Landscape Borders and Parking Areas

a. Landscape Borders: Landscape buffering will be provided to separate residential and commercial uses. The landscape border will create a visually attractive space through the use of native and low water use plant materials. Trails, paths, swales and basins will be incorporated into landscape borders.

b. Parking Areas: Landscape will enhance the overall visual appearance of parking areas for commercial uses within LVSP. Canopy trees will provide shade and mitigation of the urban heat island effect.

4. Streetscapes and Entries

a. Streetscapes: Complete streets will define LVSP character while allowing for the safe passage of automobiles, bicycles, service and emergency vehicles. Providing comfortable and safe pedestrian circulation is a key component for the Specific Plan. Where appropriate, tree-lined streets with understory plantings will be incorporated to enhance the pedestrian experience. Street landscaping will comply with site visibility requirements as defined in the Sahuarita Town Code (STC).

b. Entries: Entry areas offer an opportunity for LVSP to express theming supporting the Sahuarita Square District. As such, these areas are ideal locations to introduce variety into the landscape through characteristic materials, monumentation and specialty landscaping. Enhancing entries in this manner will accentuate the arrival experience. Enhanced entry areas will be located at prominent intersections along main streets and at access points to commercial uses and recreational areas.

5. Water Harvesting

a. Passive techniques for collecting water will be incorporated into landscape borders, active and passive recreation areas, and commercial property when possible. Residential properties are encouraged to utilize water harvesting, but are not required. Harvested water will be used to supplement plant water needs and reduce consumption of potable water. An integrated multidisciplinary design approach should be utilized when considering water harvesting throughout individual development areas within LVSP. All passive water harvesting techniques should ensure infiltration of water within twelve hours to prevent mesquito problems.

b. Potential water harvesting techniques include:
   i. Water Harvesting Basins - slight depresions in the ground approximately six to ten inches in depth and appropriate for use on gently sloped or nearly flat land. Ideally located along paths, trails, sidewalks, landscape medians, and parking islands. Basins work best in conjunction with curb cuts, curbless medians and rain gutters with downspouts.

   ii. Swales and Benches- berms constructed out of earthen materials (dirt and rock) placed on and parallel to a contour line to collect water behind it. A spillway and rock apron should be incorporated to direct the flow of water out. Appropriate for use on gentle slopes in large areas such as parks and open space. Swales and benches may be used individually or in conjunction with others in a cascading waterfall manner.

c. Constructed water harvesting infrastucture such as frenchdrains, gabion walls, swales off-contour and collection tanks, both above and below ground are allowed. These techniques vary in size and capacity and should be incorporated with assistance from a knowledgeable professional.

I. Parks and Open Space

1. Parks:

a. Parks will provide recreation and gathering space within the Specific Plan area. Amenities shall include, but are not limited to, shade structures, ramadas, playgrounds, turf areas and walking paths. Larger shade trees will be utilized to accentuate the park feel and provide greater shade. The final size, location and amenities will be determined during the platting and/or development plan process. A

Recreational Area Plan (RAP) will be submitted with tentative plats in order to meet Parks & Recreation requirements and must be approved prior to or concurrent with approval of tentative plats. The final size location and amenities will meet or exceed the standards of the Parks and Recreation Area Design & Development Standards Manual.

b. Smaller, privately-owned, pocket parks will be provided within each residential block and will typically be one acre or less in size. Pocket parks are more intimately-scaled facilities intended to be within walking distance of all residential properties. They will be connected via paths, trails, and sidewalks and provide amenities as outlined in the Town of Sahuarita Parks and Recreation Area Design & Development Standards Manual.

c. Two neighborhood parks will be provided. These parks will vary in size from two to ten acres, will be centrally located within a neighborhood or adjoining neighborhoods/open space areas and will be designed to serve passive and active opportunities. These parks may develop as public and or private parks with limited access to certain amenities. The neighborhood parks will be accessible via trails, paths, and sidewalks and serve as destination locales for pedestrians within the greater network of recreation opportunities provided by LVSP.

d. The recreation network will be accessible to adjoining neighborhoods by strategically aligning alternative transportation facilities with other paths and facilities planned by FICO and Rancho Sahuarita, contributing to the larger planned recreation amenities in this area of Sahuarita.

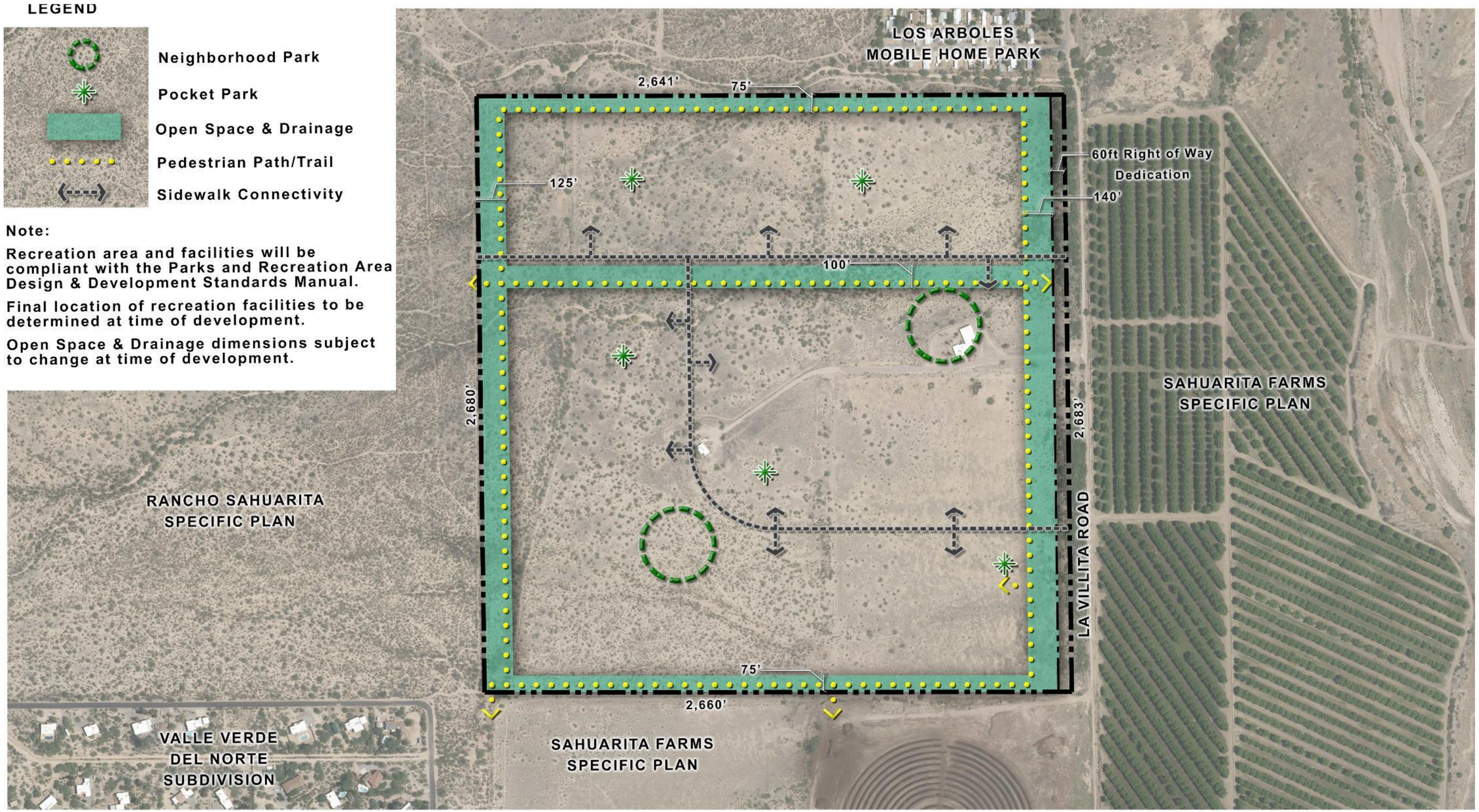
e. A neighborhood park will be constructed at the early onset of development. It is expected that work will begin on one neighborhood park prior to completion of ten percent build-out. Work on individual pocket parks will begin prior to ten percent build-out of the residential block it is located in. The second neighborhood park will be completed prior to the completion of seventy-five percent of total LVSP build-out.

2. Open Space

a. Open space is intended to provide a natural area that provides visual relief to and from surrounding development. Open space areas will be existing on site or manmade. Any natural drainage areas will also act as primary open space. Trails and paths will be incorporated within open space to include a recreation element. The final open space size and configuration will be determined during the platting and/or development plan process, but a minimum 10 percent (16.2 acres) of the overall LVSP acreage shall be provided and may include recreation areas. Recreation amenities in the open space area will meet or exceed the standards of the Parks and Recreation Area Design & Development Standards Manual.

See Exhibit II.I.2: Recreation Concept.

Exhibit II.I.2: Recreation Concept



LA VILLITA

J. PHASING

The general phasing of the project is expected to start with development in the northeast portion of the Specific Plan area, along with the required off-site and on-site roadways, utilities and drainage infrastructure that will be necessary to serve all the master planned development. It is expected that LVSP will develop from the north to the south in blocks/neighborhoods that are necessary to meet market demand. The timing depends on economic conditions in the region. The phasing plan is subject to change; however, the necessary infrastructure will be provided to accommodate logical phasing of the development. The following is a conceptual phasing plan for the Specific Plan infrastructure improvements separated into two stages: initial improvements, and full build-out improvements.

See Exhibit II.J.1: Phasing Concept.

1. Initial improvements

For the development of the Specific Plan area, the existing wastewater facilities will be evaluated to ensure there is existing capacity for the development and determine if expansion of the Sahuarita Wastewater Treatment Facility will be needed or not. The ultimate design of the gravity outfall sewer, to be located along La Villita Road will be determined and extended to the northeast corner of the development.

For potable water and fire control, Farmers Water Co. will upgrade the existing water storage tanks, well and booster pumps as necessary to serve the development and size the water distribution lines, with the required fire flow and pressure to serve the development. A 16-inch water line will be extended along Sahuarita and La Villita Roads to the project site. See Farmers Water Master Plan for more details and exhibits regarding the water system upgrades.

Associated with the Transportation improvements, the Traffic Impact Study for the development of LVSP provides a detailed study for the opening and 5- and 10-year horizon years. The extension of La Villita Road along the east side of the development is unpaved and there is no public right-of-way (ROW). La Villita Road is a proposed north-south aligned Ultimate 120-foot ROW, 4-lane divided collector road. The development will dedicate the half ROW and build the west half of the 4-lane, divided collector road improvements along the frontage of the property. The site has two accesses to the roadway network: an 84-foot ROW collector roadway connecting the site with La Villita Road on the east end and connecting the future Rancho Sahuarita Boulevard on the west end. The La Villita Road collector roadway and drainage infrastructure will be built in phases running north to south as development parcels and circulation connections are needed.

A master block plat showing ROW dedications and utility easements will be filed for the Specific Plan area in accordance with the currently adopted development standards of the Town of Sahuarita. The Master Assurances shall be prepared prior to construction permits via third party trust agreements. The Master Project CC&R's will be finalized and recorded at that time.

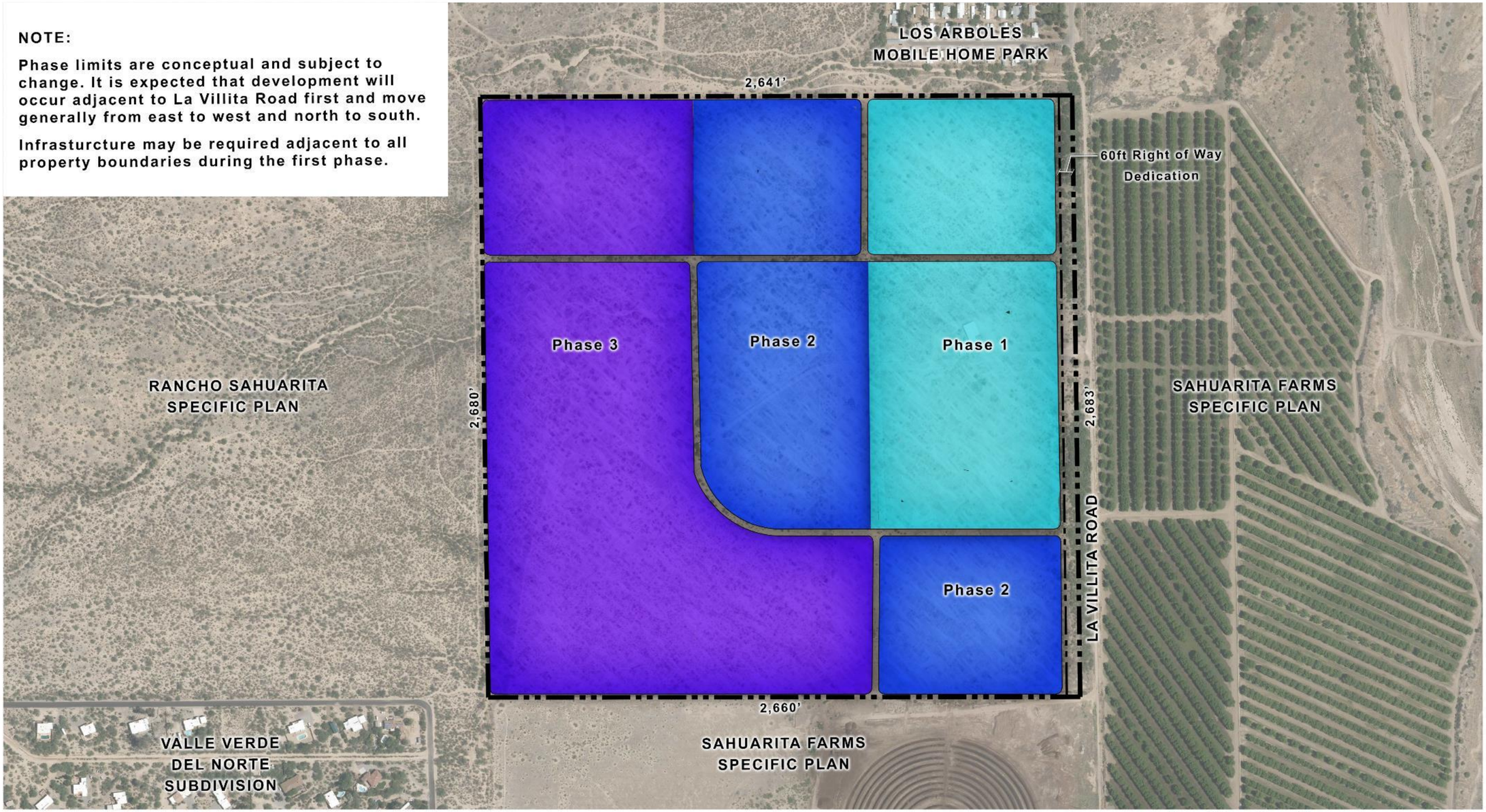
The storm drainage infrastructure and channels will be designed and built along the west boundary and along the roadways to service the planned land development blocks. Channel construction will proceed in segments relative to land development phasing and roadway construction.

The off-site Electric, Gas, Telephone, and Cable utility improvements will be designed to the required capacity to serve the development blocks in order to provide the primary feeders from each of the utilities into the Specific Plan area.

2. Full build-out improvements

Individual subdivision plats, assurances and development plans will be filed for the block areas within each of the planned land development phases. The subdivision roads, drainage, and utility infrastructure systems, parks, open space, and trails will be designed and extended from the spine infrastructure improvements to provide development opportunities in the individual planning areas. Proposed subdivision roads will be public unless the subdivision is gated, in which case the streets will be private.

Exhibit II.J.1: Phasing Concept



LA VILLITA

III. Development Regulations

III. DEVELOPMENT REGULATIONS

The following provides development regulations for La Villita Specific Plan. All new development within the Specific Plan shall conform to building, fire and other applicable safety standards.

A. VILLAGE CENTER (equivalent zone: B-1)

1. Permitted Uses

   Those uses listed under *B-1* in *Table 18.42-1* of *STC 18.42.020* with the modifications listed in LVSP sections III.A.2 and 3. *STC 18.42.030 Performance Standards* applicable to specific uses shall apply as shall the conditional use permit procedures listed in the table.

   Attached and Detached One-Family Dwellings are permitted.

   Sub-Area A2 may be developed with a minimum density of 6 du/acre if one of the following is true: a) Upon full build-out of the remainder of the Specific Plan a minimum of 8 dwelling units per acre and/or nonresidential uses has NOT yet been developed in Sub-Area A2; OR b) A minimum of 8 dwelling units per acre and/or nonresidential uses equal to the acreage of Sub-Area A2 is developed in other Village Center Sub-Areas.

2. Specific Accessory Structures

   The following shall be allowed as ancillary to permitted uses. If an accessory use is not specifically mentioned below but is determined by the Planning Director to be accessory to a permitted use in this Specific Plan, it shall be an allowable use.

   a. Detached accessory structures on residential lots, such as: tool sheds, patios and cabanas, noncommercial hobby shops, workshops, and studios, children's playhouses, etc. up to 15 feet in height
   b. Detached garages up to 18 feet in height

3. Prohibited Uses

   The following uses are prohibited regardless of their listing as permitted or conditional uses in Table 18.42-1:

   a. Automobile/Vehicle Sales and Services
      i. Automobile Rentals, Accessory
      ii. Automobile Rentals
      iii. Automobile/Vehicle Sales and leasing
      iv. Automobile/Vehicle Service and Repair, Minor
      v. Large Vehicle and Equipment Sales and Rental
      vi. Storage of Operable Automobiles, Boats, Recreational Vehicles and Similar, Not Intended for Salvage
   b. Building Materials and Services
   c. Commercial Entertainment
   d. Commercial Recreation, Large
   e. Feed Store
   f. Funeral Parlors and Mortuaries
   g. Light Fleet-based Services
   h. Medical Marijuana Uses – Cultivation and Dispensary
   i. Non-Chartered Financial Institutions
   j. Large Retail Facility
   k. Pawn Shops

l. Sexually Oriented Businesses
m. Swap Meet or Flea Market
n. Parking, Commercial, not associated with a specific business
o. Large Retail Facility
p. Research and Development, Design or Experimentation Facility
q. Scientific Design or Experimentation
r. Warehousing and Storage
    i. Personal Mini-Storage
    ii. Commercial Warehousing
    iii. Contractor's Yard
s. Electrical Antenna and Transmission Towers outside of the right-of-way
t. Heliports

4. Residential Development Standards

Single Family (Detached)

a. Minimum site area: None
b. Minimum setbacks:
    i. Front yard:
        a. Livable area: 10 feet
        b. Front entry garage: 20 feet
        c. Side entry garage: 10 feet
    ii. Side yard:
        a. Minimum distance between buildings: 7 feet
        b. Adjacent to street: 5 feet
        c. Zero-lot-line siting is permissible
    iii. Rear yard:
        a. Main structure: 10 feet
    iv. Accessory structures:
        a. From main building(s): 7 feet
        b. From property lines: In accordance with applicable Town of Sahuarita building codes
c. Minimum lot area for single detached dwelling: None
d. Maximum lot coverage: 80 percent
e. Maximum Building height: 36 feet

Single Family (Attached)

a. Minimum site area: None
b. Minimum setbacks:
    i. Front yard:
        a. Main structures: 8 feet
        b. Front entry garage: 20 feet
        c. Side entry garage: 10 feet
        d. Accessory structures: prohibited in front yards
    ii. Side Yard:
        a. Adjacent to street: 5 feet
        b. Zero-lot-line siting is permissible
        c. Accessory structures: per Town building code
    iii. Rear Yard:

a. Main structure: 5 feet
b. Rear entry garages: 3 feet
c. Accessory structures: per Town building code

c. Maximum lot coverage: 85 percent
d. Maximum Building height: 43 feet, or 36 feet adjacent to the north or south boundaries of Village Center Sub Areas A1 and A3, respectively
e. Minimum distance between buildings: 14 feet

Multi-family

a. Minimum site area: None
b. Minimum setbacks:
   i. Main structures: 20 feet
   ii. Accessory structures:
      a. From Main Structures: 5 feet
      b. From property lines: In accordance with applicable Town of Sahuarita building codes.
c. Maximum lot coverage: 85 percent
d. Maximum Building height: 50 feet, or 36 feet if adjacent to the north, south, or west Village Center boundaries
e. Minimum distance between main multiple-dwelling buildings: 10 feet

5. Nonresidential Development Standards

a. Minimum lot area: None
b. Minimum lot width: None
c. Maximum building height: 50 feet
d. Minimum building setbacks:
   i. Adjacent to other nonresidential: 0 feet
   ii. Adjacent to residential: 40 feet
   iii. Adjacent to a public street: 20 feet
   iv. Accessory structures: per the B-1 column in STC Table 18.42-3
e. Minimum distance between main buildings: per Building Code

B. VILLAGE NEIGHBORHOOD (equivalent zone: R-5)

1. Permitted Uses

Per those listed below. The STC R-5 Multiple Residence Zone shall apply for issues in which LVSP is silent.

a. One-Family Dwelling – Attached or Duplex
b. One-Family Dwelling – Detached
c. Multiple Dwelling
d. Group Care Home
e. Assisted Living Facilities
f. Home Occupations
g. Educational, Public or Private
   i. K-12
   ii. Postsecondary and Industrial or Trade Schools
   iii. Instructional Schools (dance, music, etc.)
   iv. Pre-school or Day Care Associated with an Educational Use
h. Community Center

i. Community Gardens
j. Government Offices
k. Museums and Libraries
l. Parks and Recreational Facilities, Public or Private
m. Public Safety Facilities
n. Religious Use
o. Wireless Communications Facilities mounted to existing infrastructure, less than 50 feet in height, and unobtrusive

2. Specific Accessory Structures

The following shall be allowed as ancillary to permitted uses. If an accessory use is not specifically mentioned below but is determined by the Planning Director to be accessory to a permitted use in this Specific Plan, it shall be an allowable use.

a. Detached accessory structures on residential lots, such as: tool sheds, patios and cabanas, noncommercial hobby shops, workshops, and studios, children's playhouses, etc. up to 15 feet in height
b. Detached garages up to 18 feet in height

3. Residential Development Standards

Single Family (Detached)

a. Minimum site area: None
b. Minimum setbacks:
    i. Front yard:
        a. Livable area: 10 feet
        b. Front entry garage: 20 feet
        c. Side entry garage: 10 feet
    ii. Side yard:
        a. Minimum distance between buildings: 7 feet
        b. Adjacent to street: 5 feet
        c. Zero-lot-line siting is permissible
    iii. Rear yard:
        a. Main structure: 10 feet
    iv. Accessory structures:
        a. From main building(s): 7 feet
        b. From property lines: In accordance with applicable Town of Sahuarita building codes
c. Minimum lot area for single detached dwelling: None
d. Maximum lot coverage: 80 percent
e. Maximum building height: 36 feet

Single Family (Attached)

a. Minimum site area: None
b. Minimum setbacks:
    i. Front yard:
        a. Main structures: 8 feet
        b. Front entry garage: 20 feet

c. Side entry garage: 10 feet
d. Accessory structures: prohibited in front yards

ii. Side yard:
a. Adjacent to street: 5 feet
b. Zero-lot-line siting is permissible
c. Accessory structures: 0 feet

iii. Rear yard:
a. Main structure: 5 feet
b. Rear entry garages: 3 feet
c. Accessory structures: 0 feet

c. Maximum lot coverage: 85 percent
d. Maximum building height: 43 feet, or 36 feet adjacent to the north boundary of Sub Area B1 or the west and south boundaries of Sub Area B3
e. Minimum distance between buildings: 14 feet

Multi-family

a. Minimum site area: None
b. Minimum setbacks:
i. Main structures: 20 feet
ii. Accessory structures:
a. From Main Structures: 5 feet
b. From property lines: In accordance with applicable Town of Sahuarita building codes.
c. Maximum lot coverage: 85 percent
d. Maximum building height: 50 feet, or 36 feet if adjacent to the north, south, or west Village Neighborhood boundaries
e. Minimum distance between main multiple-dwelling buildings: 10 feet

4. Nonresidential Development Standards

a. Minimum lot area: None
b. Minimum lot width: None
c. Maximum building height: 50 feet
d. Minimum building setbacks:
i. Adjacent to other nonresidential: 0 feet
ii. Adjacent to residential: 40 feet
iii. Adjacent to a public street: 20 feet
iv. Accessory structures: per the B-1 column in STC Table 18.42-3
e. Minimum distance between main buildings: per Building Code

C. LANDSCAPE BUFFERING AND SCREENING STANDARDS

1. Landscape buffering and screening for La Villita Specific Plan should create subtle transitions between differing uses so there is a clear demarcation between uses while encouraging a well-connected and walkable atmosphere. Buffering and screening, whenever possible, should be multi-purpose and incorporate promenades, pedestrian walkways, and public gathering spaces that direct users to the various blocks/neighborhoods found in the development. The following is a list of standards for

land use transitions. All landscape buffering and screening standards shall be in accordance with the STC except where modified in this Specific Plan.

2. Where development abuts an adjoining property or a public street, the minimum landscape buffer shall be 10-feet wide.

3. Bufferyards in excess of the minimum requirement may be used for passive recreation, including, but not limited to, recreational trails, seating and public art.

4. Bufferyard tree requirements shall be reduced to two trees every 100 lineal feet when tree canopies meet or exceed fifty feet in width at maturity.

5. Refuse areas and loading areas shall be screened from adjoining properties and public right-of-way in accordance with the Sahuarita Town Code standards or as otherwise specified within this Specific Plan.

6. No screening shall be required between commercial and multi-family uses when the front or side of the commercial property faces the multi-family property in order to promote pedestrian connectivity.

D. PARKING STANDARDS

Required parking in all sub areas shall be in accordance with the *Sahuarita Town Code, Chapter 18.75 Off-Street Parking and Loading Standards*.

E. DESIGN STANDARDS

1. Purpose and Intent

La Villita Specific Plan aims to allow integration of housing and small-scale commercial uses in the Town of Sahuarita. The intent of these design standards is to ensure compatibility between uses and the proposed development standards for residential and commercial development. These standards will be applied to the entirety of the property.

2. Applicability

Residential and commercial design standards contained in this Specific Plan supersede the Design Standards set forth within Chapter 18.82 of the Sahuarita Town Code (STC). Where this Specific Plan falls silent, the STC shall apply.

3. Residential Design Standards

The following residential design standards shall be applied to all residential development.

a. Site Planning:

i. Sites shall be configured to maximize connection to open space and recreation amenities.

ii. Structures shall be configured to create visual variety along the streetscape.

iii. Pedestrian and bicycle connections must be made to existing and planned bicycle and pedestrian paths in the area.

iv. Where feasible, utilize grading, curb cutting, and drainage techniques to maximize water harvesting.

v. Orient homes to minimize solar heat gain and provide opportunities for solar energy production.

b. Architectural Design Guidelines:

i. A building's scale, proportion and massing shall create a comfortable urban environment by establishing a variety of architectural forms and details. Scale, proportion, and massing should also establish architectural patterns or features that create a coherent theme in harmony with existing/planned development. Large areas of undifferentiated or blank building facades or out-of-scale buildings shall be avoided. Varying proportions and rooflines are encouraged. The building design and street level architectural details should reinforce active streetscapes and be of visual interest to pedestrians.

ii. Building design shall incorporate textured surfaces, projections, recesses, shadow lines, color, window patterns, overhangs, reveals, or changes in parapet height to avoid monolithic shapes and surfaces.

iii. A variety of colors, heights and setbacks are encouraged to avoid unarticulated steetscapes.

iv. Walls shall be articulated using a combination of decorative columns, diversity in texture and/or materials, offsets, or landscape pockets.

v. The use of cast stone lintels, corbels, arches, stone detailing, entablatures, friezes, columns and other such elements are encouraged.

c. Materials:

Selected materials shall generally reflect the contemporary southwestern character of Sahuarita while creating a theme throughout the Specific Plan area.

The following materials are encouraged:

i. Adobe brick or brick veneer
ii. Smooth or Sand Finish Stucco
iii. Stone veneers and faux stone products on building facades
iv. Decorative concrete masonry units (CMU's)
v. Decorative glasses
vi. Ornamental metal fencing
vii. Clay tile or standing seam metal roofing
viii. Shade cloth screening
ix. Cast stone concrete caps
x. Rusted steel accents

The use of chain link fencing or unfinished CMU walls is not permitted.

4. Commercial Design Standards

The following commercial design standards shall be applied to all commercial development.

a. Live/work units and vertical mixed uses may be incorporated. Horizontal integration of residential and commercial uses on a single site is highly encouraged.

b. First floors of buildings shall have a significant portion of the facade area with windows that highlight visible activity within and outside the building. All retail floor space, or

space intended for future conversion to retail floor space, provided on the ground floor of a mixed-use building shall have a minimum floor-to-ceiling height of 11 feet.

c. Energy conservation techniques will be considered during site planning.

d. Blank walls void of architectural details or other variation are prohibited. Facades of commercial buildings shall have a varied design to avoid a uniform appearance and break down the building into smaller sections or a more pedestrian scale with each side or section varying in its architectural features, type, material, and or color.

e. Integration of fabric/canvas awnings, flat metal awnings, and trellises is encouraged.

f. All rooftop mechanical equipment shall be screened by incorporating screening into the structure and by utilizing materials compatible with the supporting building. It shall be screened in a method, such as line of site sufficient enough to ensure no adjacent properties are negatively affected by either their appearance or any noise generated by this equipment.

g. Frame major project entries with structures, enhanced landscaping, distinctive entry features and/or public art.

h. The use of passive and active water harvesting techniques is highly encouraged.

5. Monumentation and Signage

Signage will aim to create a sense of identity for the development while maintaining sensitivity to the surrounding area.

6. Lighting

All lighting shall adhere to the current Town of Sahuarita Outdoor Lighting Code as may be revised.

F. DEFINITIONS

Accessory structure: a structure, or part of a structure, that is (1) incidental to and customarily associated to the main structure on the site, and (2) located on the same lot as the principal building.

Single family attached housing: Two or more dwelling units on individual lots.

Single family detached housing: a site-built building containing only one dwelling unit.

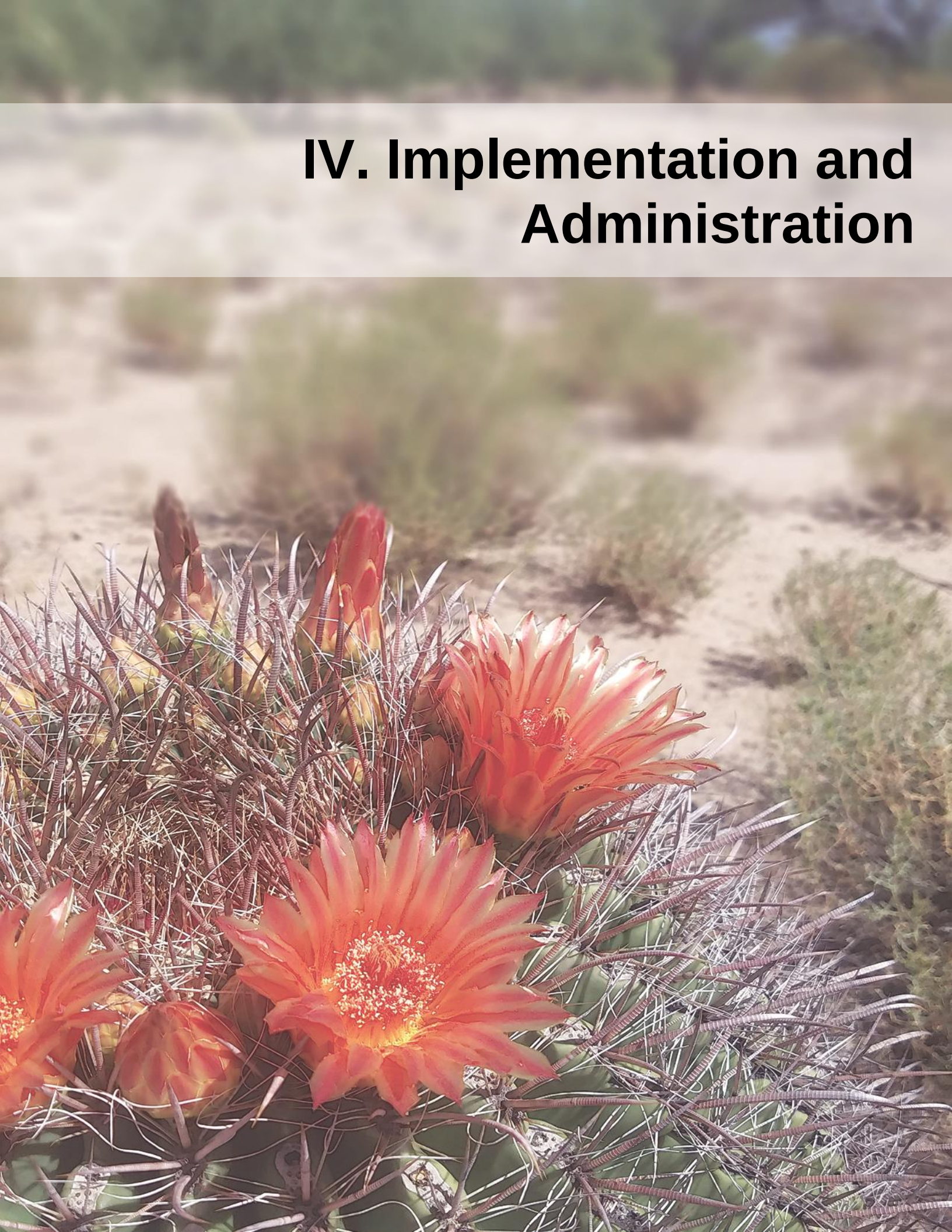
Livable area: any portion of a home except for the garage.

Density: the total number of residential dwelling units per net acre. For single family residential subdivisions, it shall be based on the total acreage of individual residential lots excluding any right-of-way, parks, drainage, or open space. For multi-family residential projects, it shall only be based on the building footprint(s).

Open space: any natural drainageways, replanting of previously disturbed areas, or natural area within the Specific Plan.

Site area: the overall size of a subdivision or nonresidential site.

IV. Implementation and Administration



IV. IMPLEMENTATION AND ADMINISTRATION

A. PURPOSE AND INTENT

This section of La Villita Specific Plan is intended to provide regulatory procedures designed to guide implementation of the Specific Plan throughout the duration of the project. This section also provides guidance regarding the general administration of amendment procedures to the Specific Plan. The provisions below shall apply to the entire project site as defined in this Specific Plan.

B. INTERPRETATIONS AND AMENDMENTS

1. Substantial Change

This Specific Plan may be substantially amended by the procedure outlined in STC section 18.90.080.C. The owner or agent of the property will submit to the Planning Director a written application to amend one or more of the Specific Plan regulations. Depending on the type of request, the Planning Director may determine the request to be a substantial change to the Specific Plan. Any change not listed in this Specific Plan as an administrative change will likely be considered substantial, but final determination shall be made by the Planning Director.

A substantial change requires the applicant to submit all sections or portions of LVSP that are affected by the change(s). After review, the Planning Director shall refer the request with his/her recommendations to the Planning and Zoning Commission for public hearing. The Planning and Zoning Commission shall make its recommendation to the Town Council, which, after public hearing, shall approve, reject or modify the proposed amendment.

2. Administrative Change

Minor changes to the explicit provisions in the Specific Plan will be made administratively as determined by the Planning Director, provided such changes are not in conflict with the overall intent as expressed in LVSP. Any changes must conform to the goals and objectives of the Specific Plan. The following shall be considered administrative changes to LVSP:

a. Minor changes to internal Sub Area boundaries that do not increase density or land use intensity adjacent to existing residential development.
b. Changes to the approved conservation plan for LVSP.
c. Placement and/or construction of identity or character features such as community art, entry monuments, signage, etc. unless there is a safety concern.
d. Minor modifications in the design and construction of infrastructure based upon technological advances when proposed modification is accepted by the Town.
e. Minor modifications or adjustments to open spaces, including minor alignment changes to the location of conceptual roadway circulation.

3. Interpretation

The Planning Director shall be responsible for interpreting the provisions of this Specific Plan. If any provision within this Specific Plan is ambiguous or unclear, the Planning Director shall be responsible for interpreting the intent of the Specific Plan. Appeals to the Planning Director's interpretation may be made to the Board of Adjustment.

C. PLANNING PROCESS

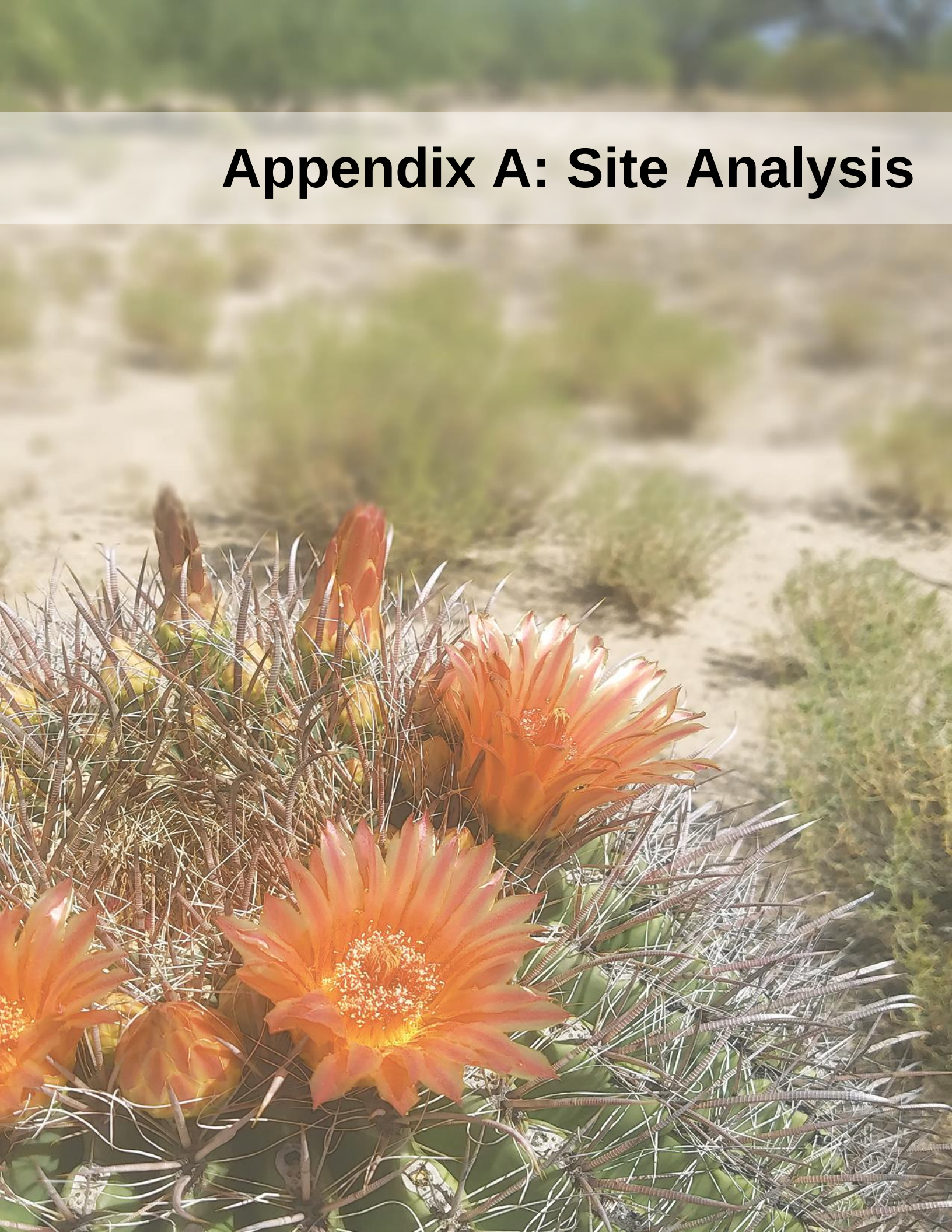
All new development within the Specific Plan shall conform to applicable building, fire and other life safety standards. Prior to issuance of a building permit, the property owner(s) shall obtain approval of a Subdivision Block Plat, Development Plan and/or Subdivision Plat for the subject site that adheres to all applicable codes and requirements of the Town of Sahuarita. Where these regulations and standards vary from the STC, the Specific Plan regulations shall apply. Where the Specific Plan is silent, the relevant standards of the STC shall apply.

D. PROPOSITION 207

The property owners(s) shall execute and record a disclaimer regarding Proposition 207 rights, with the language as follows:

1. The property owner(s)/developer(s) acknowledges that neither the rezoning of the property nor the conditions of rezoning give the property owner(s)/developer(s) any rights, claims or accuses of action under the Private Property Rights Protection Act (Arizona Revised Statutes Title 12, chapter 8, article 2.1) to the extent that the rezoning or conditions of rezoning may be construed to give the property owner(s)/developer(s) any rights or claims under the Private Property Rights Protection Act. The property owners(s)/developer(s) hereby waive any and all such rights and/or claims pursuant to A.R.S. § 12-1134(1).

Appendix A: Site Analysis



APPENDIX A: SITE ANALYSIS

A. INTRODUCTION

The following report summarizes the site inventory and analysis for La Villita Specific Plan (also hereinafter referred to as the "subject property", "Specific Plan area", or "site"), which is located west of Old Nogales Highway and east of Interstate 19, 1.5 miles south of Sahuarita Road at the southern terminus of La Villita Road within the Town of Sahuarita, Arizona (the "Town"). The purpose of the study is to identify factors directly or indirectly influencing rezoning the Subject Property. A rezoning from the current zoning designation of Rural Homestead ("RH") to the proposed zone of Specific Plan ("SP") is requested for development of the Subject Property. This report is prepared for the Planning and Zoning Division in accordance with the Town's specific plan rezoning requirements.

The following Site Analysis and Illustrative site concept were prepared in accordance with the Town of Sahuarita Town Code, Chapter 18.90: Specific Plans. The Site Analysis and Preliminary Development sections address the required written and graphic information as specified in Chapter 18.90, subsection 18.90.050 (Specific Plan Requirements) (Town Code current through Ordinance 2019-141, passed May 28, 2019).

In addition to site reconnaissance, the report was compiled utilizing topographic and hydrologic analyses, aerial photography, responses from appropriate governmental agencies, and additional background information. The Illustrative site concept contained herein responds to the subject property's opportunities and constraints, while addressing sound engineering and planning principles.

B. EXISTING LAND USES

1. Site Location

The project site is a 162-acre site (Parcel #: 303-45-0120) located on La Villita Road, 1.5 miles south of Sahuarita Road and 2.5 miles southeast of the I-19 and Sahuarita Road interchange. The property is located in the Town of Sahuarita within Township 17 South, Range 13 East, Section 24 (**see Exhibit A.B.1: Site Location**).

2. Existing Land Uses On-site

The graded areas, utilities, private driveways and utility access roads used by the former homeowner comprise the disturbed portions of the site. One former home was located near the middle of the site while the other home was located closer to the northeastern border of the site prior to being demolished in 2016. There are also signs of previous agricultural uses throughout the site (**see Exhibit A.B.2: Existing Land Use**).

Existing Land Uses Within One-Quarter Mile:

North:	Mobile Homes, Vacant
South:	Vacant
East:	La Villita Road, Agriculture-Pecan Groves
West:	Vacant, Single Family Residential

See Exhibit A.B.2: Existing Land Use.

Exhibit A.B.1: Specific Plan Area

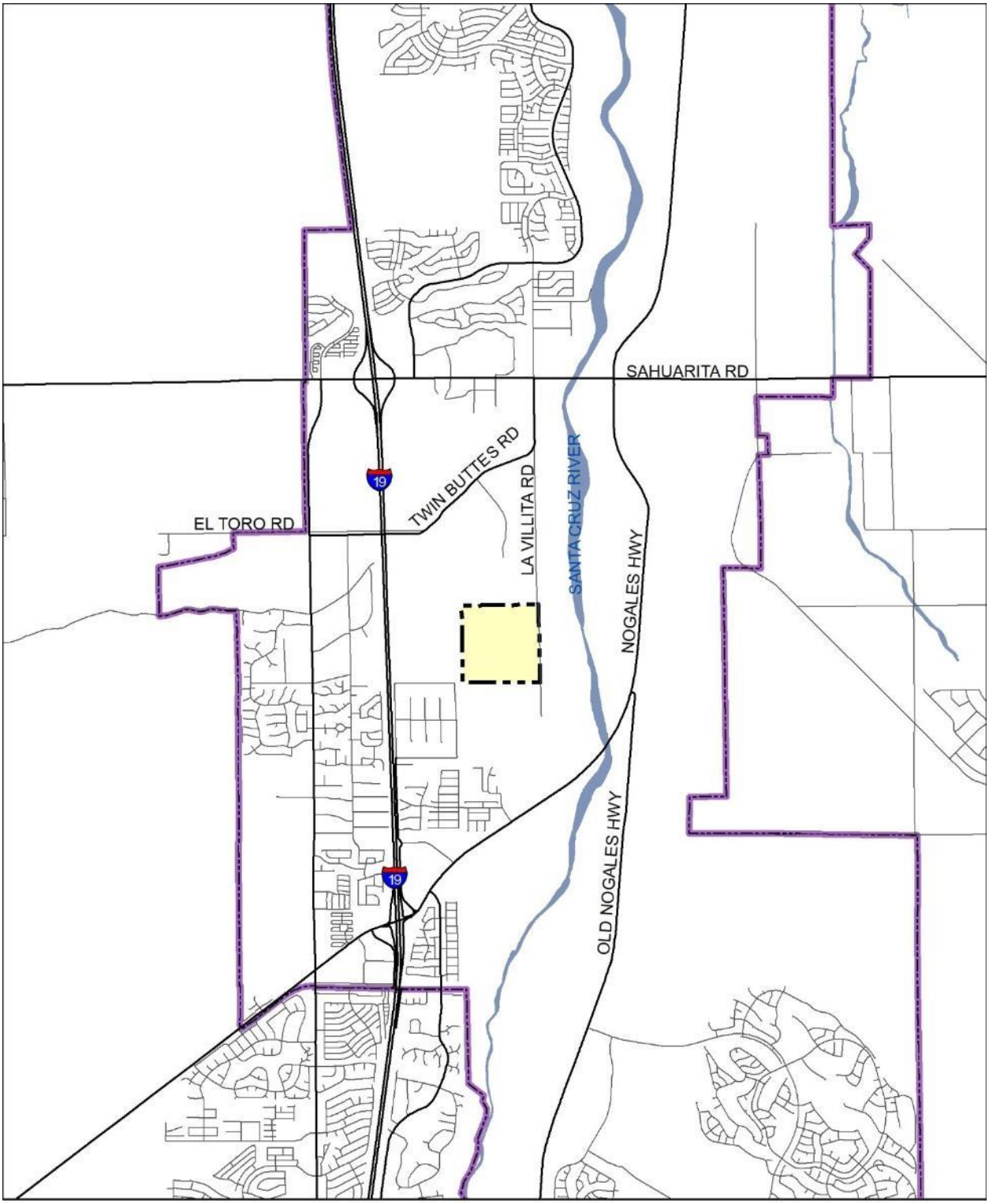
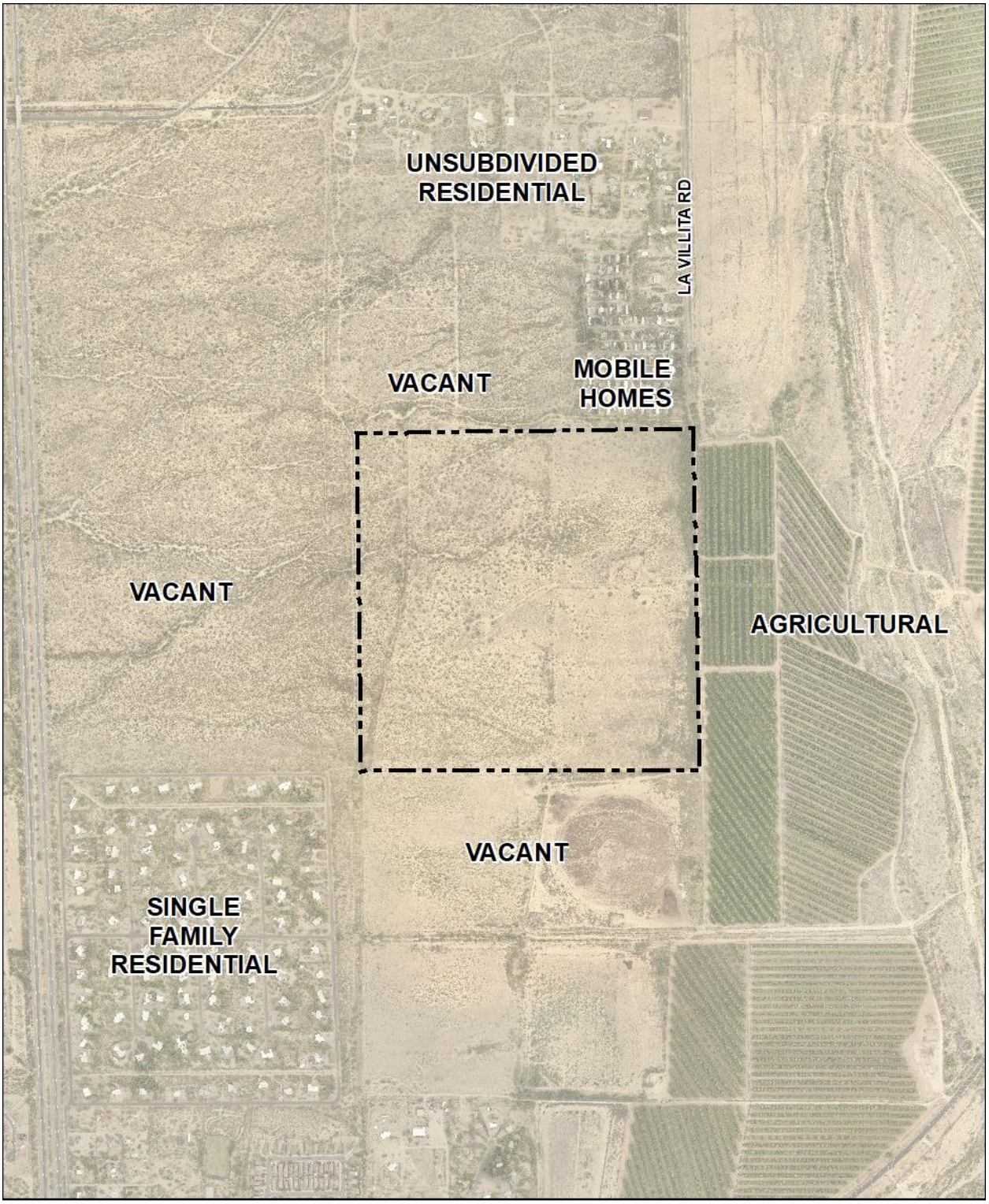


Exhibit A.B.2: Existing Land Use



Legend

Specific Plan Area

Quarter Mile Radius

NORTH

0 600 1,200

SCALE: 1" = 1,200'

FILE NAME: Existing Land Use Map.mxd
SOURCE: Pima County GIS, 2018

C. TOPOGRAPHY

1. On-site Topographic Characteristics

The site exhibits fairly flat terrain, especially in the graded portions of the two former residences. Additional past disturbance with associated topographic irregularities includes erosion, an earthen berm located near the western boundary and prior agricultural practices (**see Exhibit A.C.1: Topography**).

a. Restricted Peaks and Ridges

No restricted peaks or ridges as identified in 18.61 of the STC exist on the site or within the immediate vicinity.

b. Rock Outcrops

There are no rock outcrops on the subject property.

c. Slopes of 15% or Greater

No slopes greater than 15% exist on the site; therefore, the proposed development is not subject to Hillside Development Zone requirements.

d. d) Other Significant Topographic Features

Several natural drainage channels meander across the property from west to east toward the Santa Cruz River.

2. Average Cross-Slope

The average cross-slope of the site is **5.09**%. Given this measured cross-slope, the project site is not subject to any of the development limitations as set forth in Section 18.61.070 of the STC. The values used to calculate the average cross-slope are shown below:

$$X = \frac{I \times L \times 0.0023}{A}$$

$$5.09\% = \frac{5 \times 71{,}917 \times 0.0023}{162.55}$$

I = contour interval
L = length of contour
A = total area (excluding natural areas)
X = Average cross slope

Exhibit A.C.1: Topography

D. SOILS TESTING AND GEOLOGY

Soil within the subject property consist of three Natural Resources Conservation Service (NRCS) classifications as described in the following:

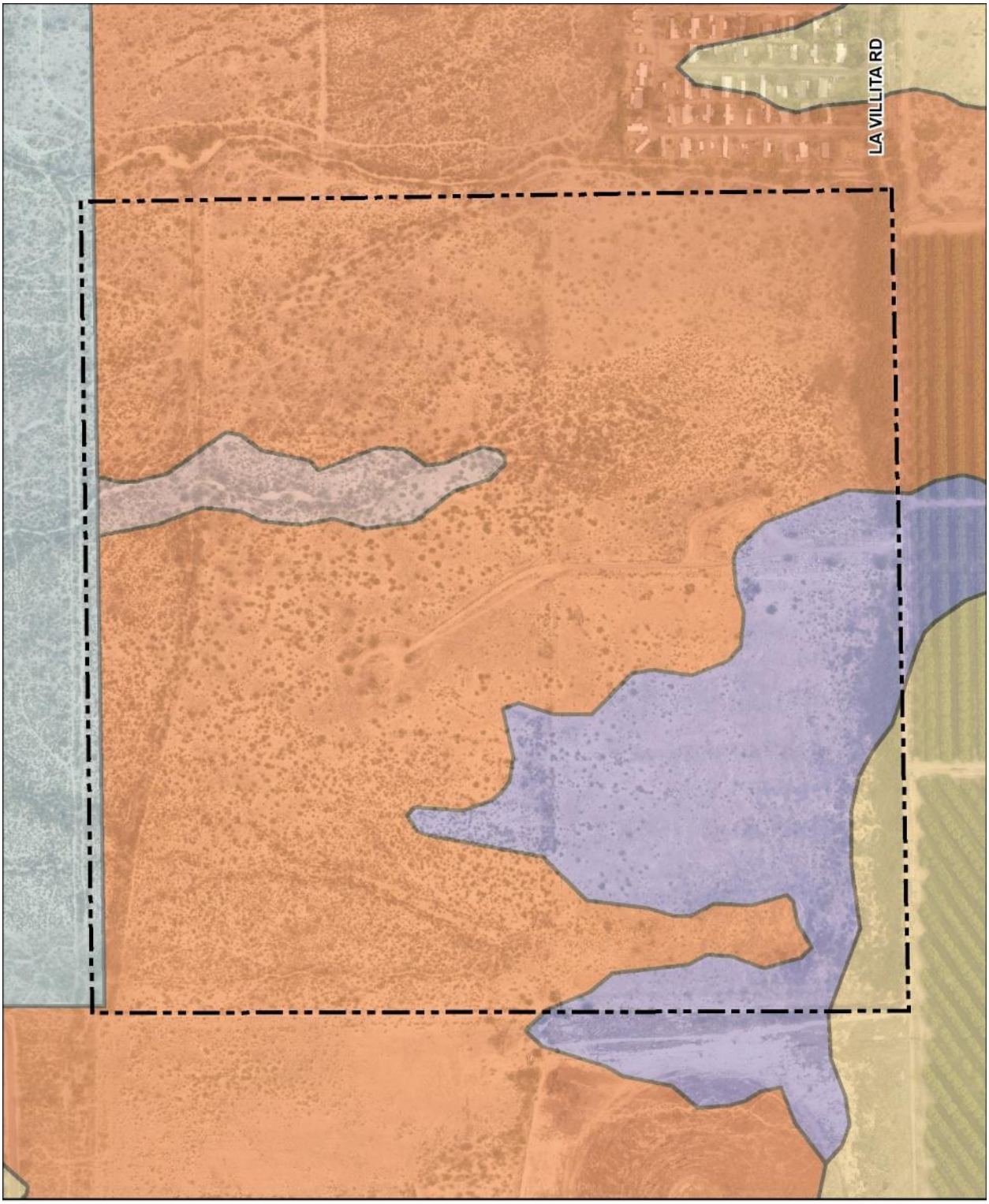
Anthony- The Anthony series consists of very deep, well drained soils formed in stratified alluvium. Anthony soils are on alluvial fans and floodplains and have slopes of 0 to 15 percent. The mean annual precipitation is about 8 inches and the mean annual air temperature is about 65 degrees F.

Gila- The Gila series consists of very deep, well drained soils formed in stratified alluvium. Gila soils are on alluvial fans and flood plains and have slopes of 0 to 5 percent. The mean annual precipitation is about 7 inches and the mean annual air temperature is about 65 degrees F.

Hayhook- The Hayhook series consists of coarse-loamy, mixed, superactive, thermic Typic Haplocambids. Hayhook soils generally occurs on foot slopes and along drainageways and have slopes of 1 to 5 percent.

See Exhibit A.D.1: Soils Map.

Exhibit A.D.1: Soils Map



E. VEGETATION

1. Vegetation Communities

Existing vegetation consists of three biomes: scrub-grassland (semidesert grassland), agriculture/developed and Sonoran Desert scrub. Scrub-grassland and agriculture/developed biomes are the most prominent biomes taking up the majority of the site. Scrub-grassland dominates the western half while agriculture/developed biome covers the eastern portion. This vegetation pattern is consistent with natural revegetation overtaking past disturbance on the site. Sonoran Desert scrub makes up the remainder of the vegetation on site. This is concentrated along the western boundary, consistent with the undisturbed land to the west. However, an earthen berm in this area has altered the natural drainage of the site. The vegetation west of the berm has subsequently been augmented due to the change in drainage. La Villita Road is slightly elevated above the eastern property boundary which results in excess ponding of water in this area. Plants have adapted to this excess water and has resulted in rapid plant growth and densities that are higher than usual (**see Exhibit A.E.1: Vegetation Communities**).

2. Vegetation Density

Most on-site vegetation consists of desert scrub, sparsely distributed across the site, except for along a man-made earthen berm on the western portion of the property. This berm has altered natural drainage patterns resulting in more dense vegetation in this area. Vegetation along the berm consists of tree and shrub species typically associated with natural drainage areas. The densest vegetation occurs along the eastern property boundary along La Villita Road. Off-site grading has created a dam effect on this portion of the property causing stormwater to remain on site. This has resulted in a dense ribbon of vegetation running along the roadway (**see Exhibit A.E.2: Vegetation Densities**).

Exhibit A.E.1: Vegetation Communities

Exhibit A.E.2: Vegetation Densities

Legend

Specific Plan Area

Sparse

More Dense

Densest

NORTH

0 250 500

SCALE: 1" = 500'

FILE NAME: Vegetation Density Map.mxd

SOURCE: Pima County GIS, 2018

F. HYDROLOGY

1. Off-site Watersheds

There are seven offsite watersheds affecting the development of this site. Offsite watersheds from the Rancho Sahuarita site are made up of large braided washes that convey across the western project site. All offsite watersheds and peak flow rates are per the approved Rancho Sahuarita Regions 6-9 Tentative Block Plat and associated Drainage Report, approved in February 2014. Offsite watersheds OS-1 through OS-7 convey easterly towards the west side of the property. Offsite concentration points and a summary of offsite peak flow rates are located on *Exhibit A.F.1: Site Development Drainage Map*.

2. Off-site Natural and Man-made Features

Watershed OS1 through OS7 convey under Interstate 19 via various existing culverts before conveying east towards the project site. Downstream of Interstate 19, Watershed OS1 conveys southeasterly through the existing neighborhood southwest of the project site. Flows collect along a man-made berm at the southwestern corner of the project site where they are routed north into the site. Watersheds OS2 through OS7 convey east through the Rancho Sahuarita site via multiple existing braided washes.

3. Upstream Offsite Watersheds with 100-year Discharges Greater than 100 CFS

Watersheds OS1, OS3, OS4 and OS7 have 100-year discharges greater than 100 cfs (**see Exhibit A.F.1: Site Development Drainage Map**).

4. On-site Hydrology

Please refer to *Exhibit II.E.1: Site Development Drainage Map.*

a. 100-year floodplains with a discharge greater than or equal to 100 cfs
The site is comprised of six onsite watersheds. Onsite watersheds 4E, 5E, and 6E produce regulatory flow rates of more than 100 cfs. Although only three onsite watersheds produce regulatory flow rates, regulatory flows from offsite watersheds produce onsite regulatory floodplains in all six onsite watersheds. Existing regulatory floodplains are delineated on Exhibit A.F.2.

b. Sheet-flooding areas with their average depths
The subject parcel consists of a leveled and fallow agricultural field that remains mostly clear of vegetation, with the exception of small mesquites, brush, and grasses. Sheet-flooding occurs within the eastern half of the site where regulatory floodplains confluence and spread out across non-incised topography. Sheet flood depths are approximately 0.5-feet. Sheet flooding conveys easterly and ponds against the west side of La Villita Road at a depth of approximately 1-ft before ultimately overtopping the road.

c. Federally-mapped floodways and floodplains
Per the Federal Emergency Management Agency's (FEMA) digital Federal Insurance Rate Map (FIRM) (Map number 04019C0365L), effective June 16, 2011, the project site is located within a clear Zone X. FEMA defines this zone as areas outside of the 500-year flood (0.2% annual chance of flooding). Therefore, there are no federally mapped floodways or floodplains onsite. See *Exhibit A.F.2 FIRM Map* for applicable portions of Map Number 04019C0365L.

d. Preliminary Jurisdictional Delineation (JD)

Any impacts to potential jurisdictional waters of the U.S. would require a Section 404 permit from the U.S. Army Corps of Engineers. The potential for jurisdictional status of ephemeral washes with regards to Section 404 permitting requirements is undetermined at this time. Under the Nationwide permit program, the fill limitation is 0.5 acres total for residential development. Per recent rule changes by the federal government, there may be no jurisdictional areas on the site and a Section 404 permit may not be required.

e. Peak discharges both entering and leaving the site for 100-year events which exceed 100 cfs

Offsite watersheds OS1, OS3, and OS4 enter the site with regulatory flow rates; however, once onsite, watersheds OS2, and OS5 confluence with these flows along the man-made berm to produce a larger regulatory floodplain. Onsite, the larger floodplain splits when flows break out through multiple berm breaches and regulatory flows convey east or north. The split flows conveying north leave the site along the north boundary west of the man-made berm. Regulatory flows conveying east through the berm breaches confluence and become sheet flooding within the eastern half of the site. These sheet flows back up against La Villita Road at a depth of approximately 1-foot until flows break out over La Villita Road and sheet into the adjacent eastern property.

f. All mapped, regulated riparian habitat classifications

Please see the Riparian section provided later in this document.

g. Existing drainage infrastructure (i.e. culverts, basins, etc.)

An onsite existing man-made berm runs parallel to the western project boundary. The berm is approximately 100 to 400-feet east of the western boundary from south to north, respectively. Large offsite flows convey across the western project boundary, east towards the man-made berm. When flows reach the berm, they break through multiple berm breaches and continue east across the site or convey north along the west side of the berm.

h. Lakes, ponds, wetlands, springs, or other source(s) of perennial surface water

There are no sources of perennial surface water on-site.

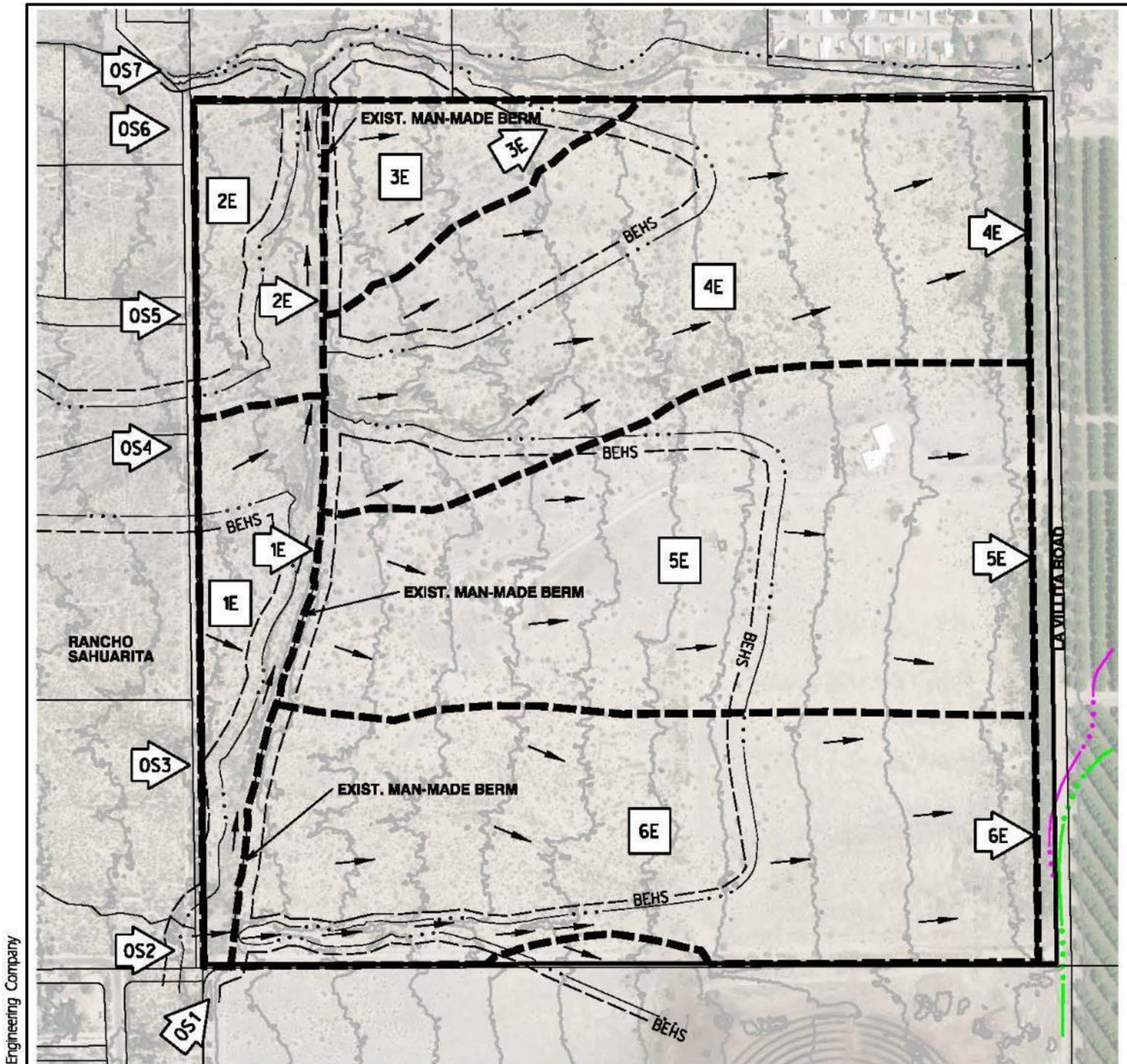
i. Erosion hazard setbacks

Per the Town of Sahuarita Floodplain Ordinance Section 14.25.100, a setback of 50-feet was applied to all minor natural washes with a base flood peak discharge of less than 2,000 cfs, but more than 500 cfs. A distance of 25-feet was applied for all minor natural washes with base flood peak discharge of 500 cfs or less.

5. Existing Drainage Conditions along the Downstream Property Boundary.

The downstream property boundary is La Villita Road. In the existing condition, the east portion of the property is marked by sheet floods of approximately 0.5-feet. Flows will convey east and will collect against the west side of La Villita Road until they break out over the road and sheet flow into the adjacent eastern property. All pre-development on-site watersheds are mapped on Exhibit A.F.1. Hydrologic information for the pre-development watersheds is located in the tables on *Exhibit A.F.1: Site Development Drainage Map*.

Exhibit A.F.1: Site Development Drainage Map



LEGEND

SCALE: 1" = 350'

- 1 — WATERSHED
- 1 — CONCENTRATION POINT
- FLOW DIRECTION
- WATERSHED BOUNDARY
- REGULATORY 100-YEAR FLOOD LIMITS (EXISTING)
- -BEHS— BUILDING EROSION HAZARD SETBACK
- FEMA FLOODPLAIN (EFFECTIVE 100-YR- ZONE AE)
- FEMA FLOODPLAIN (EFFECTIVE 500-YR-ZONE X)

OFFSITE PEAK FLOWS		
WATERSHED CPs	AREA [ac]	Q100 [cfs]
OS1*	149.0	603
OS2*	24.5	95
OS3*	26.9	107
OS4*	733.0	1,420
OS5*	17.4	79
OS6*	11.4	44
OS7*	55.5	166

*Per Rancho Sahuarita Approved Tentative Plat, Oct. 30, 2013

EXISTING PEAK FLOWS*				
WATERSHED CPs	AREA [ac]	Q100 [cfs]	CUMULATIVE CPs	CUMULATIVE Q100 [cfs]
1E	11	44	-	-
2E	9	36	-	-
3E	7	28	-	-
4E	43	129	4E+BREAKOUT @ 2533 & 2641+Wash 1	1,993**
5E	48	144	5E+BREAKOUT @ 2854	214***
6E	44	131	6E+BREAKOUT @ 4182	431****

*All cummulative flows are based on direct summation
**Includes breakout flows over berm at HEC-RAS XSs 2533 and 2641
***Includes breakout flows over berm at HEC-RAS XS 2854
****Includes breakout flows over berm at HEC-RAS XS 4182

EXHIBIT I-C.1
EXISTING SITE ANALYSIS DRAINAGE MAP
LA VILLITA
A PORTION OF SECTION 24, TOWNSHIP 17 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN, PIMA COUNTY, ARIZONA.

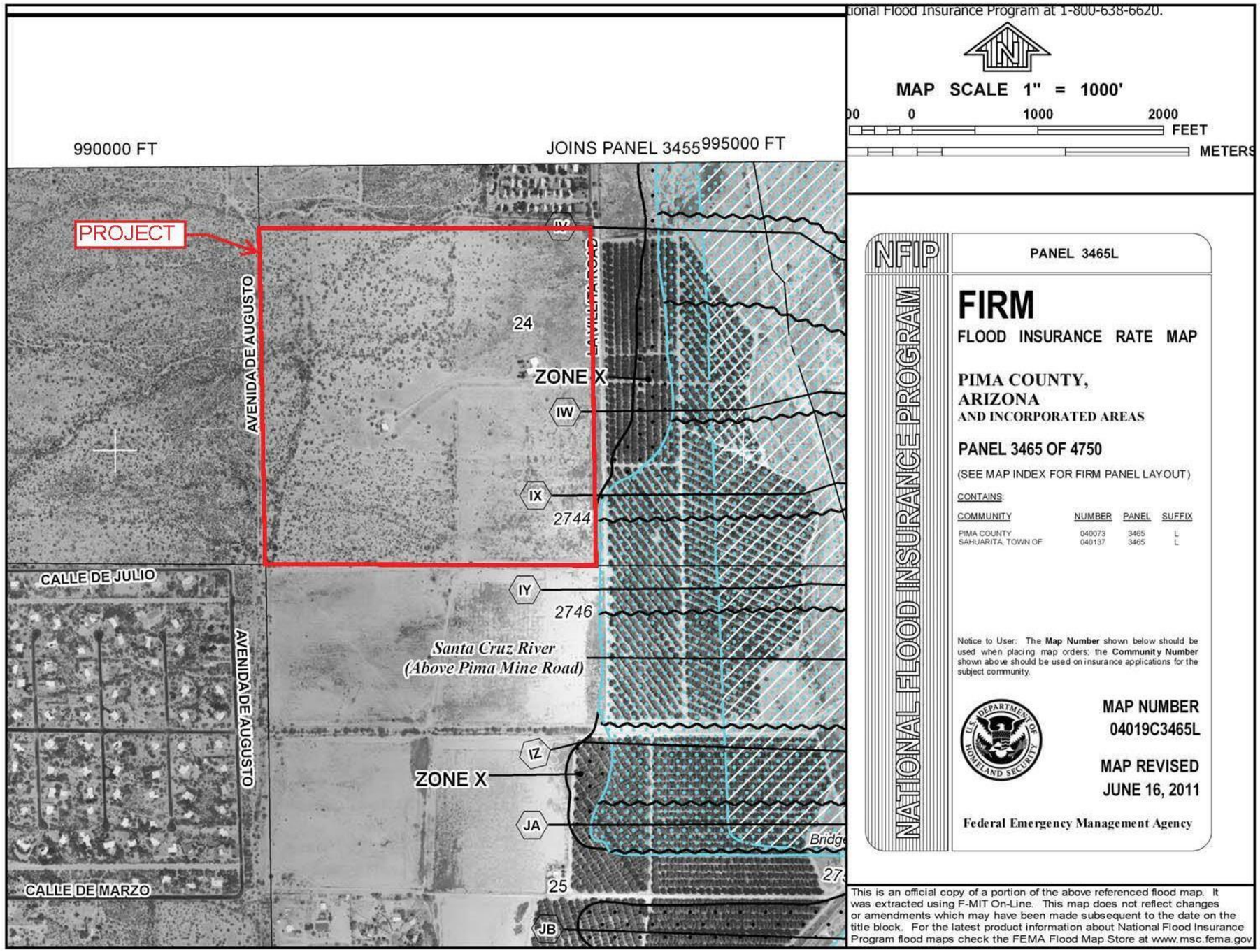
DECEMBER 30, 2019

© 2020 Rick Engineering Company

RICK ENGINEERING COMPANY
3945 EAST FORT LOWELL ROAD - SUITE 111
TUCSON, AZ 85712
520-795-1000

F:\4501_La_Villita_Property\Hydro\x4501_DREX_01_SITE-ANALYSIS.dgn 14-JAN-2020

Exhibit A.F.2: Site FIRM Map



G. RIPARIAN AREAS

There are two areas of mapped Xeroriparian Area ‘C’ on-site. The largest piece is approximately 8.27-acres in size and is located near the western property boundary. This mapped area extends in a north by north east direction adjacent to a man-made berm. The second area of mapped Xeroriparian Area ‘C’ is near the midpoint of the northern property boundary and is approximately 0.47 acres in size. The mapped riparian area boundaries are in a state of decline due to changing water flows across the site. Much of the vegetation is showing significant signs of distress such as dead and dying limbs and tree trunks, insect infestations and general poor health. There are little to no signs of regeneration and the predominate species found is Creosote.

An inventory of the larger riparian area found there is 324 viable trees and 62 viable shrubs in the 8.27-acre mapped area. This does not meet the standards for Xeroriparian ‘C’ density ratios of 45 trees per acre and 70 shrubs per acre.

Exhibit A.G.1: Riparian Areas

H. CULTURAL RESOURCES

A cultural resources survey was completed by Bowers Environmental Consulting in August of 2019 (submitted under separate cover). The survey was preliminary in nature and performed a cultural resources site file search, field evaluation and review of wildlife agency records. The findings suggest a survey for cultural and historic resources has not been completed and records are not available through the Arizona State Museum. A new survey is recommended.

See Exhibit A.H.1: Cultural Survey.

Exhibit A.H.1: Cultural Survey

BOWERS
Environmental Consulting

Environmental Planning ▪ Natural Resource Management ▪ Biology ▪ Regulatory Compliance ▪ Sustainability

August 4, 2019

Cory Thompson, P.E.
Rick Engineering Company
3945 E. Fort Lowell Road, Suite 111
Tucson, Arizona 85712

RE: Environmental Due Diligence for the La Villita Property in Sahuarita, Pima County, Arizona

Dear Mr. Thompson,

Bowers Environmental Consulting, LLC (BEC) completed a cultural resource site file search, field evaluation, and review of wildlife agency records to identify potential constraints regarding the acquisition and development of the referenced property. Results of these due diligence level investigations are summarized below and figures and representative photographs are attached.

Cultural Resources Site File Search - BEC contracted with Tierra Right of Way Services to conduct a standard search of the AZSITE database within a one-mile radius around the parcel.

- No evidence was found in the Arizona State Museum files that the property has been surveyed for cultural or historic resources.
- Our findings contradict the information summarized in the draft Site Analysis report, which indicates the site was surveyed by P.A.S.T in 2001. However, our research indicates P.A.S.T. surveyed an adjacent parcel, but not the subject property.
- Because of the conflicting information, and if a previous survey was completed more than 10 years ago, we recommend a new Class III survey of the entire property.

Jurisdictional Wash Evaluation – BEC conducted a site visit to determine the potential jurisdictional status of ephemeral washes on the site with regards to Section 404 permitting requirements. Results of this research are depicted on the attached figure, and we found the following:

- Three potential jurisdictional wash segments were identified. Preliminary estimates indicate that there are approximately 0.28 acres of potential jurisdictional waters of the U.S. on the property as indicated on the attached figure. These drainages are outlined in red on the attached figure.
- One isolated wash segment begins on the west side of the north-south berm and flows east into the center of the site. This wash is 0.32 acres, but may not be considered potential jurisdictional waters of the U.S. because it dissipates into the floodplain near the center of the property.
- Any impacts to potential jurisdictional waters of the U.S. would require a Section 404 permit from the U.S. Army Corps of Engineers. Under the Nationwide permit program, the fill limitation is 0.5 acres total for residential development.

4502 W Ironwood Hill Drive ▪ Tucson, Arizona 85745 ▪ Phone: 520-909-8604 ▪ E-mail: rion@cox.net

Biological Evaluation – BEC conducted a search of the United States Fish and Wildlife Agency (USFWS) Information for Planning and Consultation (IPaC) on-line database to determine if any federally listed species have the potential to occur on the La Vallita property. The findings are summarized below.

- Five species (Jaguar, California least tern, Yellow-billed cuckoo, Northern Mexican gartersnake, and Pima pineapple cactus) were identified by the IPaC database as potentially occurring on the property or nearby.
- The natural history and habitat requirements for these species was reviewed and compared with habitat found on the property.
- Results of this evaluation found that endangered Pima pineapple cactus is known to occur in the area.
- It is recommended to conduct a biological evaluation to document compliance with the Endangered Species Act and Section 404 permit compliance.
- Because Pima pineapple cactus are known to occur in the area, a survey specific for this species should be conducted in accordance with current state and federal guidelines.

4502 W Ironwood Hill Drive ▪ Tucson, Arizona 85745 ▪ Phone: 520-909-8604 ▪ E-mail: rion@cox.net

I. PUBLIC FACILITIES IN THE AREA

1. Police

The nearest police station is located approximately 2 miles north of the site at the Town Hall complex on Sahuarita Road and Desert Gem Lane

2. Fire

The nearest fire station is Rural Metro Fire Department station number 79 located at Sahuarita Road and West Via Rancho Sahuarita, approximately 2 miles north of the site.

3. Library

The nearest library is Pima County's Sahuarita Library located at Sahuarita Road and West Via Rancho Sahuarita, approximately 2 miles north of the site.

4. Post Office

The Post office is located at Sahuarita Road and West Via Rancho Sahuarita, approximately 2 miles north of the site.

5. Schools

There are several schools located north of the property. They are identified as follows:

a. *Sahuarita Primary School, Sahuarita Intermediate School, Sahuarita Middle School and Sahuarita High School are all located approximately 2 miles north of the site on the north side of Sahuarita Road east of Rancho Sahuarita Boulevard.*

b. *Copper View Elementary School is located approximately 2 miles north of the site on Starlight View Lane.*

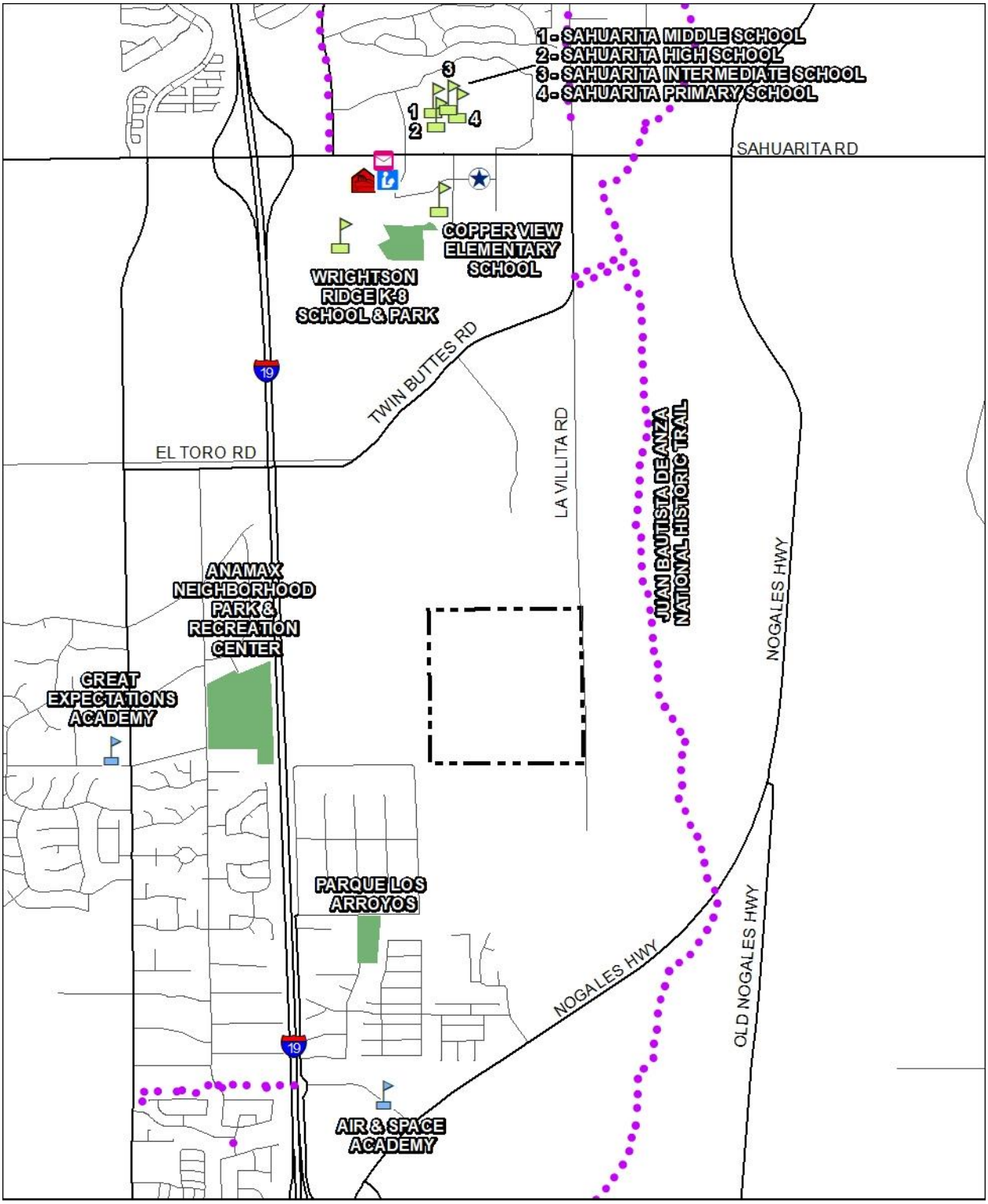
c. *The newly constructed Wrightston Ridge K-8 School is located on South Rancho Sahuarita Boulevard south of Sahuarita Road approximately 1.5 miles north of the site.*

d. *Air and Space Academy is a charter school located approximately 1.5 miles southwest of the site on West Calle Arroyo Sur and South Nogales Highway.*

See Exhibit A.I.1: Public Facilities Map.

The owner has met with the Sahuarita United School District and has discussed imposing a per unit fee for all new dwelling units to help offset the cost of school improvements and other district needs. Accordingly, a donation or reservation of property for the school district is not anticipated.

Exhibit A.I.1: Public Facilities Map



J. RECREATION AND TRAILS

1. Parks, Recreation Areas, and Public Trails

Currently there are no parks, trails or other recreation facilities located on or adjacent to the subject property. The nearest public park is Parque Los Arroyos located approximately ½ mile to the southwest.

2. Proposed Parks, Recreation and Public Trails

The Town of Sahuarita Parks, Recreation, Trails and Open Space Master Plan shows no proposed park service areas in the vicinity of the subject property. The plan does identify bike and trail improvements associated with the extensions of Rancho Sahuarita Boulevard and La Villita Road, respectively.

Two other specific plans adjoin the property, Rancho Sahuarita Specific Plan and Sahuarita Farms Specific Plan. Each plan contains proposed recreation and trail elements that influence the property.

a. Rancho Sahuarita Specific Plan:

Recreation and Trails. Planning areas to the west of the subject property will each have a private neighborhood mini-park. The location and size of which will be determined during the platting process. The pedestrian and bike path system running along the existing and future alignment of Rancho Sahuarita Boulevard will terminate at the western boundary of the subject property. Open space also associated with drainage areas will terminate at the western boundary of the subject property as well.

b. Sahuarita Farms Specific Plan:

Parks, Open Space and Trails Plan. The planning areas to the east and south of the subject property are identified as Village Neighborhood. Proposed neighborhood parks are identified within each planning area and will likely be private. The planning area to the south also includes two private pocket parks connected to the main neighborhood park by neighborhood pathways. A neighborhood pathway extends north from the southern planning area and terminates at the southern boundary of the subject property. A Town-wide connector pathway is identified along La Villita Road. Tributary corridor open space runs along the southern boundary of the site. Two of these corridors also terminate at La Villita Road to the east, one at the northeast corner of the subject property and the other at the southeast corner.

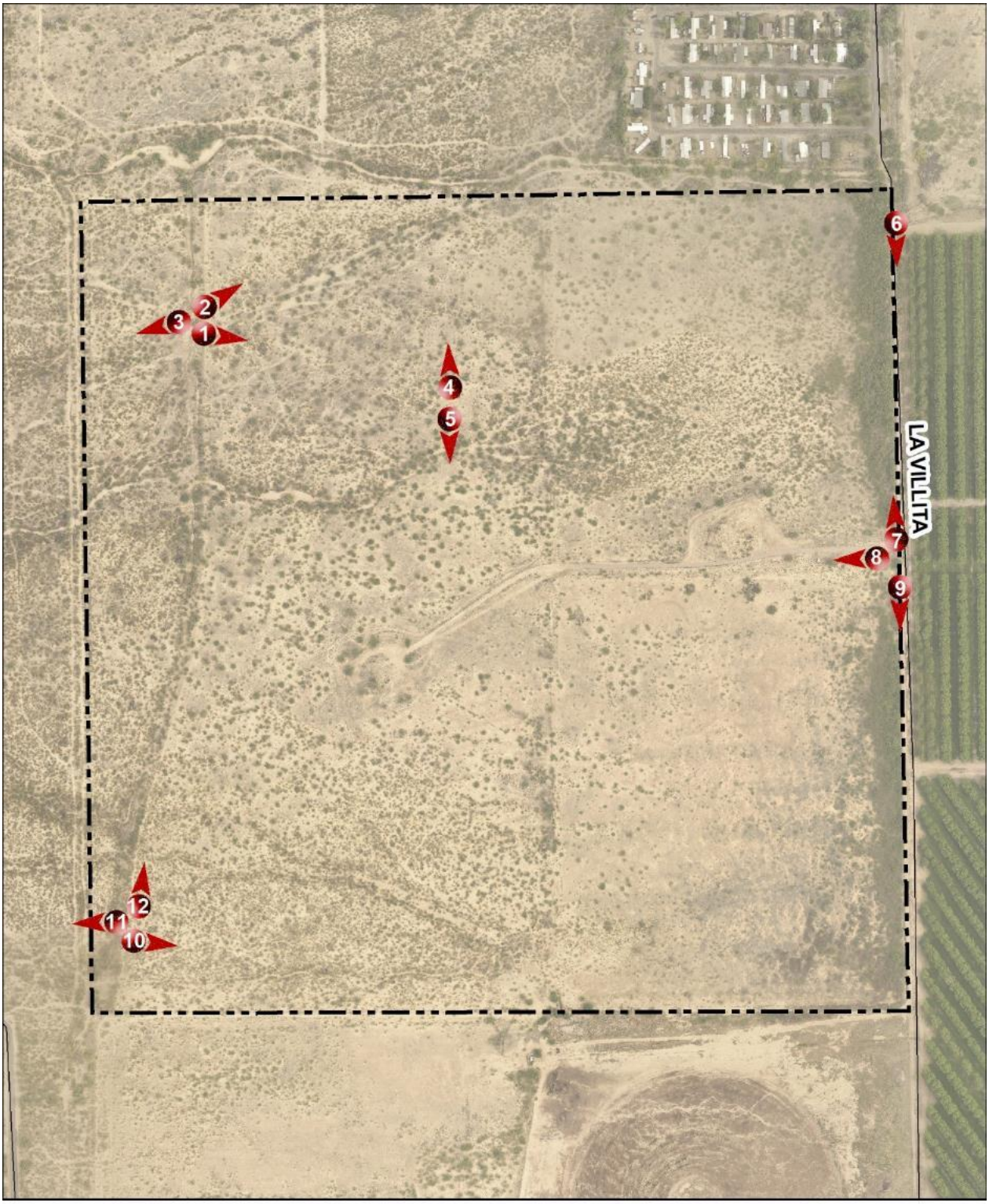
See Exhibit A.I.1: Public Facilities Map.

K. VIEWSHEDS

Viewsheds onto and off the site vary greatly depending on your location within the property. The view variation is due to topography, existing vegetation, and the size of the property. Views onto the site from La Villita (looking west) are mostly blocked by existing dense vegetation. From the middle of the site looking in all directions are views of upland Sonoran Desert scrub vegetation consisting primarily of Creosote and Mesquite. The size of the scrub tends to limit expansive views across the site. The topography of the site is elevated towards the western property boundary, from this vantage point there are sweeping views of the site and mountain vistas in the background. It is also possible to see the mine tailings further west of the property on the western side of I-19 from this location. Views onto the site from off property are minimal for the afore mentioned reasons except from locations west of the site.

Areas around the former homesites and the road leading to them have been cleared and from these locations the views onto the property and off the property offer the most visibility. See *Exhibit A.K.1 Photo Locations* for the approximate location and direction of pictures and the photos from those points

Exhibit A.K.1: Photo Locations



LEGEND

Property Boundary

Parcels

3 Photo Location and Direction

NORTH 0' 250' 500'

FILE NAME: photo point.mxd

SOURCE: Pima County GIS, 2018

APPENDIX A: SITE ANALYSIS

#1: View from an area near the northwest property corner looking southeast

#2: View from an area near the northwest property corner looking northeast

#3: View from an area near the northwest property corner looking southwest

#4: View from an area just north of the middle of the property looking north

APPENDIX A: SITE ANALYSIS

#5: View from an area just north of the middle of the property looking south

#6: View from the northeast property corner looking south along La Villita Road

#7: View from the midpoint of the eastern property boundary looking north along La Villita Road

#8: View from the midpoint of the eastern property boundary looking east across the property

#9: View from the midpoint of the eastern property boundary looking south along La Villita Road

#10: View from an area near the southwest property corner looking west

#11: View from an area near the southwest property corner looking west

#12: View from an area near the southwest property corner looking north

L. UTILITIES (EXISTING INFRASTRUCTURE)

1. Wastewater

The site lies within the Town of Sahuarita Designated Management Area and there are currently no wastewater facilities serving the property. The Sahuarita Wastewater Reclamation Facility is located along Rancho Sahuarita Boulevard north of Camino Rancheria and west of Rancho Sahuarita Boulevard. The Reclamation Facility is a public wastewater facility and is owned, operated and maintained by the Town of Sahuarita.

a. Locations of Existing Public Sewers in Relation to the Project Site

Currently a public gravity sewer conveyance system exists at the southwest corner of La Villita Road and Sahuarita Road intersection. The public sewer conveyance system is owned, operated and maintained by the Town of Sahuarita.

2. Water

There are currently no water utilities serving this property.

3. Private utilities

Electricity, natural gas, telecommunications and cable services will be extended to the project site at the time of development through agreements with individual utility companies.

a. Electric

The site lies within the Tucson Electric Power Company Service area.

b. Communication

CenturyLink, Comcast and Cox Communications all provide service within the surrounding area.

c. Natural Gas

The site lies within the Southwest Gas Service area.

Exhibit A.L.1: Wastewater Capacity Response Letter

Sahuarita
PUBLIC WORKS

August 30, 2019

Kris Harman
Green Valley 28 LLP
2776 E Virginia Street
Gilbert, AZ 85296

Subject: Parcel 303-45-0120

Dear Mr. Harman:

It is understood that current plans for development of this area is for the Parcel 303-45-0120 located within the Sahuarita Sewer Service Area per our Town Code, chapter 13.35.

This letter shall serve to advise you that the above referenced project is located within the Designated Management Area and Sewer Service Area for the Town of Sahuarita. This project would be served by the Town of Sahuarita Wastewater Utility. This letter is not a statement of current capacity or guarantee of capacity.

Sincerely,

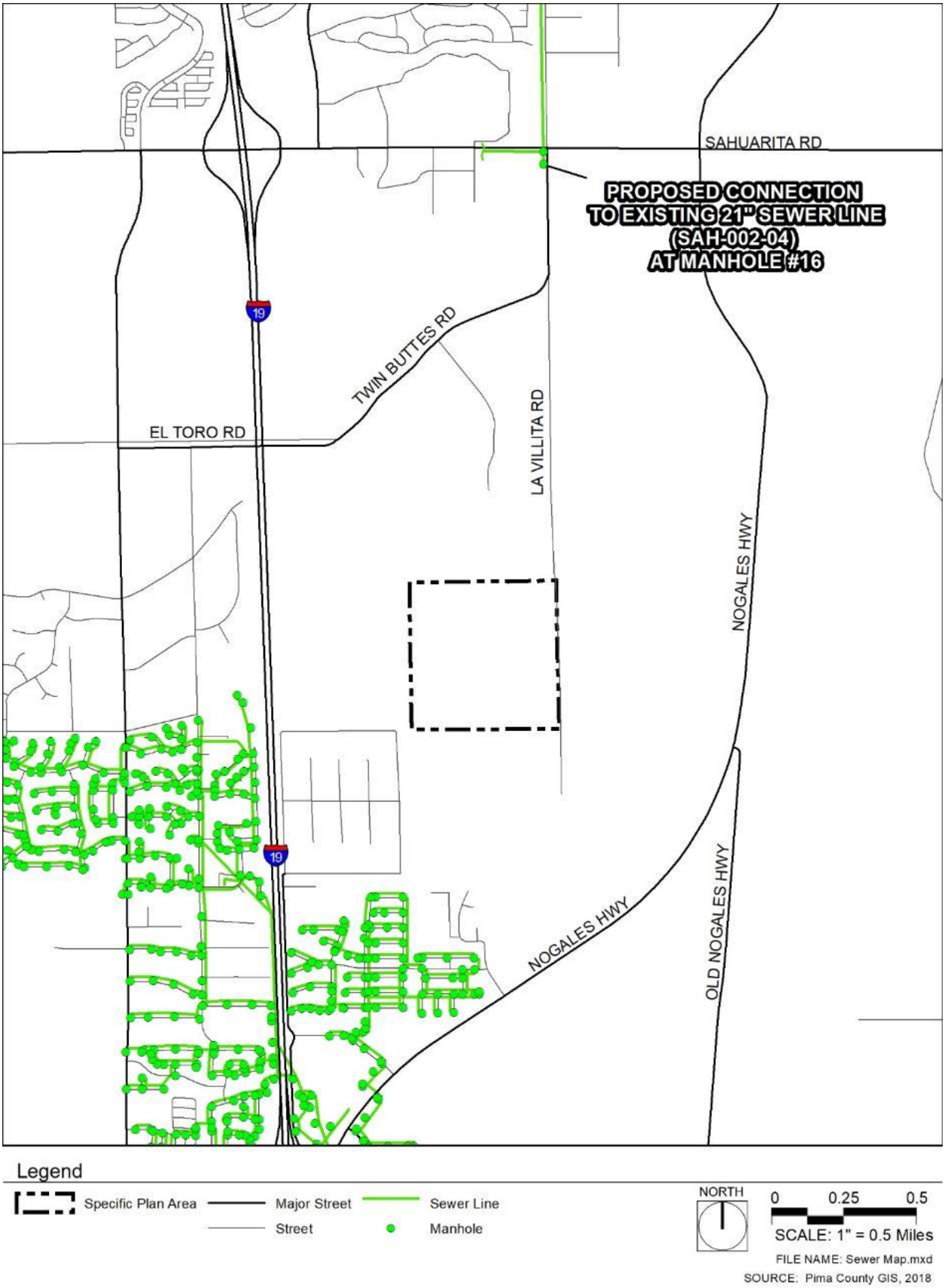
Town of Sahuarita – Department of Public Works

Heidi A. Lasham, PE, ENV SP

Asst. Town Engineer

Town of Sahuarita – Department of Public Works
375 W. Sahuarita Center Way, Sahuarita, AZ 85629
520.344.7100 www.sahuaritaaz.gov

Exhibit A.L.2: Existing Sewers



M. WILDLIFE

Arizona Game and Fish Department
Project ID: HGIS-10143

project_report_gvl_03_33560_34633.pdf
Review Date: 12/4/2019 03:18:38 PM

Species of Economic and Recreation Importance Predicted within the Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Callipepla squamata	Scaled Quail					1C
Odocoileus hemionus	Mule Deer					
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

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

Project Type Recommendations:
Fence recommendations will be dependant upon the goals of the fence project and the wildlife species expected to be impacted by the project. General guidelines for ensuring wildlife-friendly fences include: barbless wire on the top and bottom with the maximum fence height 42", minimum height for bottom 16". Modifications to this design may be considered for fencing anticipated to be routinely encountered by elk, bighorn sheep or pronghorn (e.g., Pronghorn fencing would require 18" minimum height on the bottom). Please refer to the Department's Fencing Guidelines located on Wildlife Friendly Guidelines page, which is part of the WIldlife Planning button at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use. Use only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used as often as possible to lower the range of species affected by lighting. All lighting should be shielded, canted, or cut to ensure that light reaches only areas needing illumination.

Minimize 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 https://www.azgfd.com/hunting/regulations.

Page 10 of 12

The construction or maintenance of water developments should include: incorporation of aspects of the natural environment and the visual resources, maintaining the water for a variety of species, water surface area (e.g., bats require a greater area due to in-flight drinking), accessibility, year-round availability, minimizing potential for water quality problems, frequency of flushing, shading of natural features, regular clean-up of debris, escape ramps, minimizing obstacles, and minimizing accumulation of silt and mud.

Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (include spawning seasons), and to reduce spread of exotic invasive species. We recommend early direct coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

Based on the project type entered, coordination with State Historic Preservation Office may be required (http://azstateparks.com/SHPO/index.html).

Trenches should be covered or back-filled as soon as possible. Incorporate escape ramps in ditches or fencing along the perimeter to deter small mammals and herptefauna (snakes, lizards, tortoise) from entering ditches.

Communities can actively support the sustainability and mobility of wildlife by incorporating wildlife planning into their regional/comprehensive plans, their regional transportation plans, and their open space/conservation land system programs. An effective approach to wildlife planning begins with the identification of the wildlife resources in need of protection, an assessment of important habitat blocks and connective corridors, and the incorporation of these critical wildlife components into the community plans and programs. Community planners should identify open spaces and habitat blocks that can be maintained in their area, and the necessary connections between those blocks to be preserved or protected. Community planners should also work with State and local transportation planning entities, and planners from other communities, to foster coordination and cooperation in developing compatible development plans to ensure wildlife habitat connectivity. The Department's guidelines for incorporating wildlife considerations into community planning and developments can be found on the Widlife Friendly Guidelines portion of the Wildlife Planning page at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Design culverts to minimize impacts to channel geometry, or design channel geometry (low flow, overbank, floodplains) and substrates to carry expected discharge using local drainages of appropriate size as templates. Reduce/minimize barriers to allow movement of amphibians or fish (e.g., eliminate falls). Also for terrestrial wildlife, washes and stream corridors often provide important corridors for movement. Overall culvert width, height, and length should be optimized for movement of the greatest number and diversity of species expected to utilize the passage. Culvert designs should consider moisture, light, and noise, while providing clear views at both ends to maximize utilization. For many species, fencing is an important design feature that can be utilized with culverts to funnel wildlife into these areas and minimize the potential for roadway collisions. Guidelines for culvert designs to facilitate wildlife passage can be found on the home page of this application at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Based on the project type entered, coordination with Arizona Department of Environmental Quality may be required (http://www.azdeq.gov/).

Based on the project type entered, coordination with Arizona Department of Water Resources may be required (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.

Development plans should provide for open natural space for wildlife movement, while also minimizing the potential for wildlife-human interactions through design features. Please contact Project Evaluation Program for more information on living with urban wildlife at PEP@azgfd.gov or at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/ and https://www.azgfd.com/Wildlife/LivingWith.

Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan (species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement vegetation.

The Department requests further coordination to provide project/species specific recommendations, please contact Project Evaluation Program directly at PEP@azgfd.gov.

Project Location and/or Species Recommendations:
HDMS records indicate that one or more **Listed, Proposed, or Candidate** species or **Critical Habitat** (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at http://www.fws.gov/southwest/es/arizona/ or:

Phoenix Main Office
9828 North 31st Avenue #C3
Phoenix, AZ 85051-2517
Phone: 602-242-0210
Fax: 602-242-2513

Tucson Sub-Office
201 N. Bonita Suite 141
Tucson, AZ 85745
Phone: 520-670-6144
Fax: 520-670-6155

Flagstaff Sub-Office
SW Forest Science Complex
2500 S. Pine Knoll Dr.
Flagstaff, AZ 86001
Phone: 928-556-2157
Fax: 928-556-2121

Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat connectivity feature***. The **County-level Stakeholder Assessments** contain five categories of data (Barrier/Development, Wildlife Crossing Area, Wildlife Movement Area- Diffuse, Wildlife movement Area- Landscape, Wildlife Movement Area- Riparian/Washes) that provide a context of select anthropogenic barriers, and potential connectivity. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://www.azgfd.com/wildlife/planning/habitatconnectivity/identifying-corridors/.
Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

N. TRAFFIC AND ROADWAYS

1. Existing Roadways

The site is currently accessible from the north via an unimproved portion of La Villita Road. Sahuarita Road is the nearest accessible arterial approximately 1.5 miles north. South Nogales Highway is approximately ¾ of a mile south of the site and is currently inaccessible from La Villita Road. The future extension of La Villita Road to South Nogales Highway will make it the nearest arterial to the site.

See Exhibit A.N.1: Roadway Map.

2. Future Roadways

Several future roadway plans are under consideration in the vicinity of the subject property. Each have the potential to impact the site.

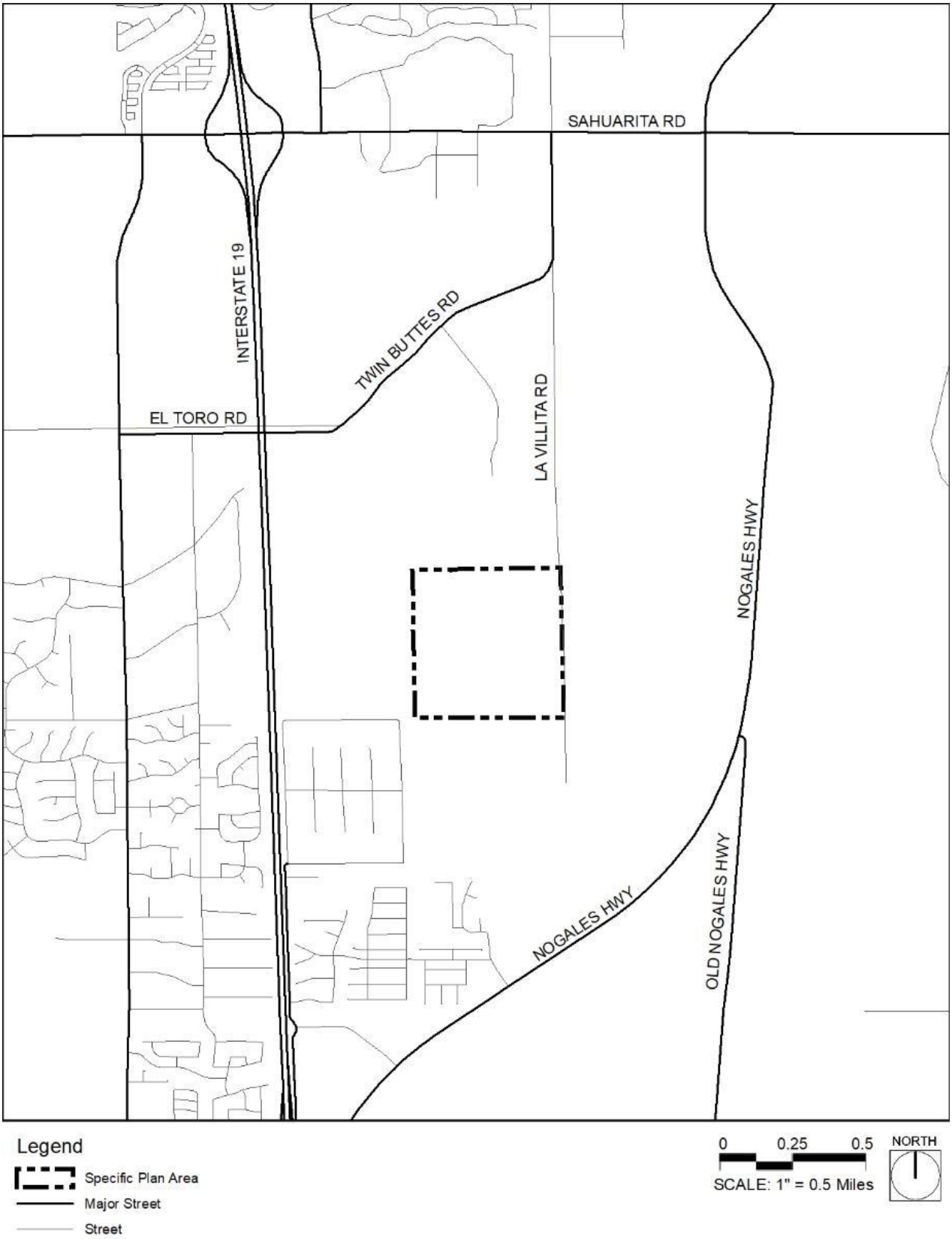
a. Aspire 2035 - Major Streets and Routes:

The Sahuarita General Plan, *Aspire 2035*, identifies future roadways on the Major Streets and Routes Map. El Toro Road is determined to be a future arterial with a 300ft right-of-way. However, the location of the future El Toro alignment is currently in question as part of the Sonoran Corridor planning efforts. The final location of El Toro Road will be of great importance as it will be the arterial closest to the subject property. The Major Streets and Routes Map also identifies the future extensions of Rancho Sahuarita Boulevard and La Villita Road respectively. Each of these roadways are classified as collectors. The Rancho Sahuarita Boulevard right-of-way alignment currently terminates at the western boundary of the site. The future alignment for extending this road to South Nogales Highway will need to be solidified. The extension of La Villita Road south to Nogales Highway will greatly enhance connectivity for existing and future residents.

b. Sonoran Corridor Study:

The Arizona Department of Transportation has selected a preferred corridor alternative for the Sonoran Corridor to connect Interstate 10 with Interstate 19. The Corridor Selection Report from June 2019 recommended three corridors for further study. The preferred corridor alternative modifies El Toro Road by moving it to the south of its current alignment to connect with I-19. Although a preferred alternative has been selected, the Sonoran Corridor is still an ongoing project. It will be many years before the final corridor alignment is finalized and built. The potential impact of the Sonoran Corridor on the subject property will continue to be monitored.

Exhibit A.N.1: Roadway Map

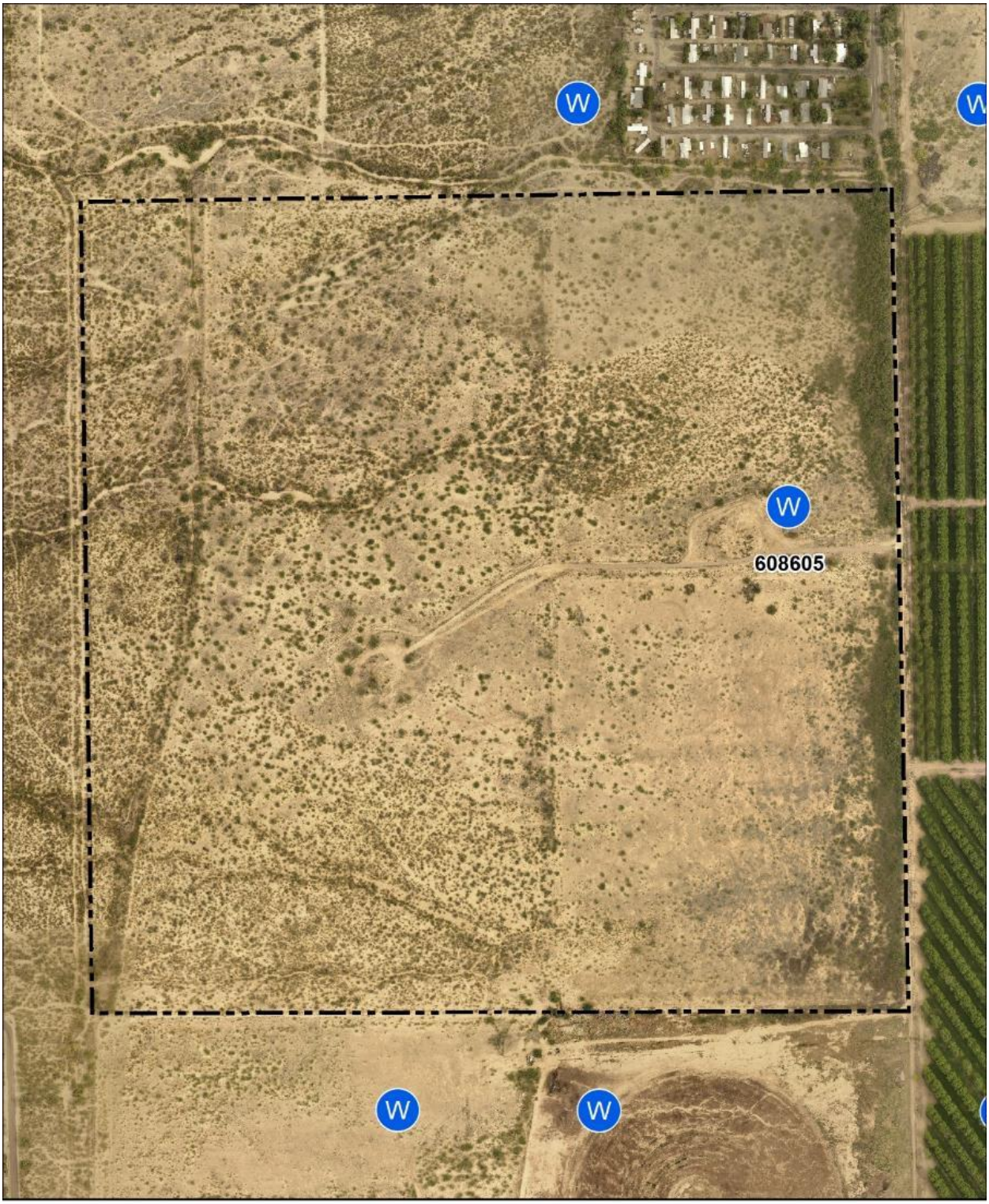


O. WELL SITES

There is one well located on the site. It is registered as well number 608605 with the Arizona Department of Water Resources. The registry report states this well is registered to the Anamax Mining Company and is used for water production for stock and domestic use.

See Exhibit A.O.1: Wells.

Exhibit A.O.1: Wells



Legend

Specific Plan Area

W Well

NORTH

0 250 500

SCALE: 1" = 500'

FILE NAME: Wells Map.mxd

SOURCE: Pima County GIS, 2018

12/6/2019

AZ DEPARTMENT OF WATER RESOURCES
WELL REGISTRY REPORT - WELLS55

Location D 17.0 13.0 24 C A D

Well Reg. No. **55-**608605

AMA TUCSON AMA

Registered ANAMAX MINING CO,
PO BOX 127
SAHUARITA AZ 85629

File Type REGISTERED WELL

Applicaton Rec Date 05/21/1982

Driller No. 0

Driller Name

Driller Phone

County PIMA

Parcel No.

Tribe NOT IN A TRIBAL ZONE

Well Type EXEMPT

SubBasin UPPER SANTA CRUZ

Watershed SANTA CRUZ RIVER

Discharge Method NONE

Power NO POWER CODE LISTED

Intended Capacity GPM 0.00

Contamination Site NO - NOT IN ANY REMEDIAL ACTION SITE

Registered Well Uses

WATER PRODUCTION

Registered Water Uses

STOCK
DOMESTIC

Well Depth	0.00	**Case Diam**	0.00	**Tested Cap**	0.00
Pump Cap.	35.00	**Case Depth**	0.00	**Pump Comp Rpt**	N
Draw Down	0.00	**Water Level**	0.00	**Log**	N
Acres Irrig	0.00	**Casing Finish**	NO CASING CODE LISTED		

Well Address

Well Cross St.

Well City

Comments

Action History

Action Comment:

Page 1 of 1

References

Aerial Photographs, Pima County Pictometry, 2018.

Balanced and Critical Basin Map, Pima County.

Aspire 2035, Town of Sahuarita General Plan, adopted June 22, 2015 (amended December 9, 2019).

Sahuarita Town Code.

FEMA Flood Insurance Rate Map, Pima County, Arizona.

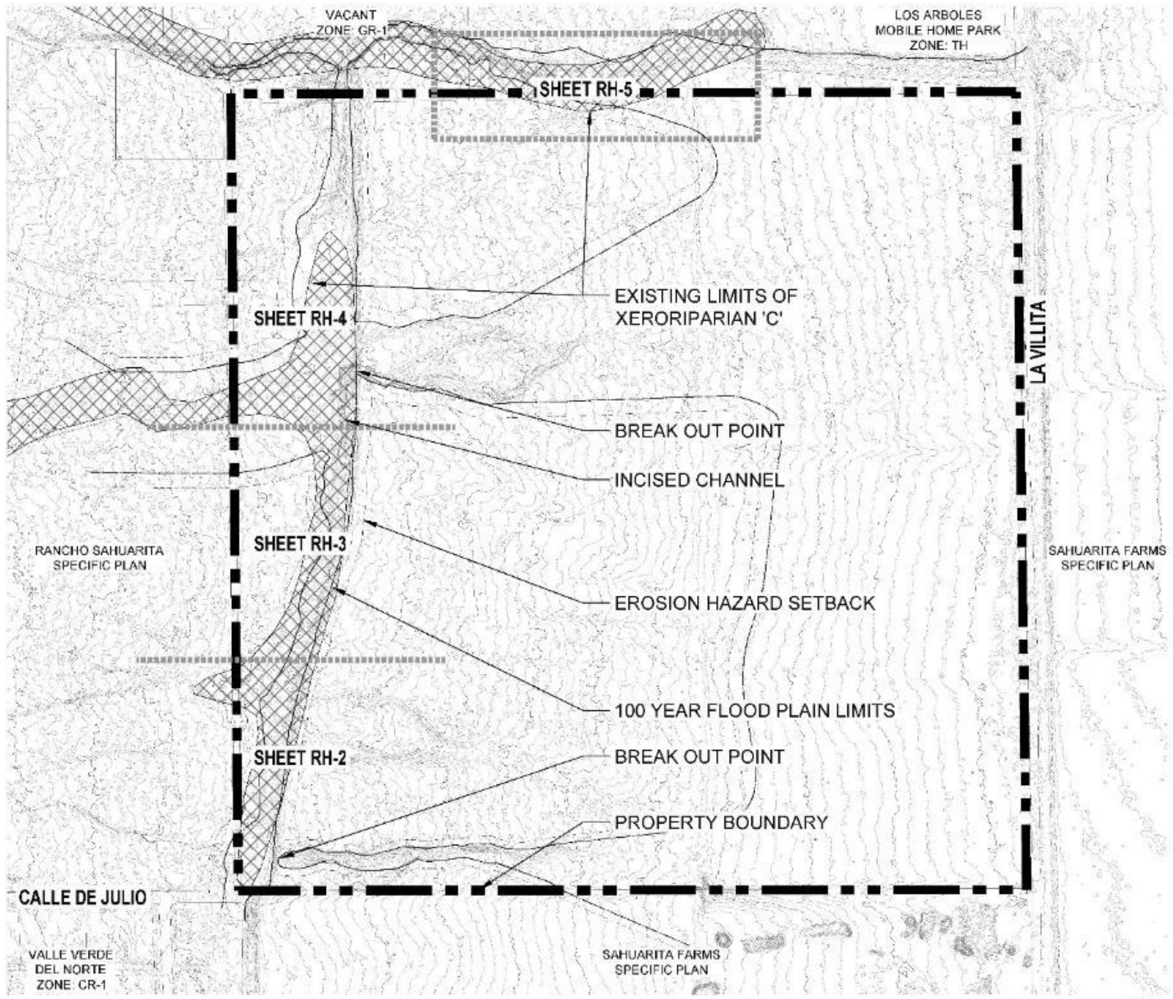
Institute of Transportation Engineers, Trip Generation Manuals, 10th Edition.

MapGuide, Pima County Geographical Information Systems, 2019.

Appendix B: Conservation Plan

LA VILLITA

RIPARIAN HABITAT CONSERVATION PLAN SA12-19-00007



Legend

- Property Line
- Existing Xeroriparian 'C'
- 100 Year Floodplain Limits
- Erosion Hazard Setback
- 1' Contour Lines

SITE SUMMARY:

TOTAL REGULATED RIPARIAN HABITAT ON-SITE: 8.7 AC
REGULATED RIPARIAN HABITAT DISTURBED ON-SITE BY THIS PROJECT: 8.7 AC
PROPOSED RECREATED RIPARIAN HABITAT: 8.7 AC

GENERAL NOTES:

1. THIS CONSERVATION PLAN MAY BE SUBJECT TO CHANGE/REVISION OF AN ADOPTED SPECIFIC PLAN.
2. A FULL INVENTORY OF THE EXISTING XERORIPARIAN 'C' ON-SITE WAS CONDUCTED OCTOBER 8TH AND 9TH 2019 TO DETERMINE TREE AND SHRUB QUANTITIES FOR A PER PLANT CONSERVATION PLAN.
3. TREES WITH A CALIPER MEASUREMENT OF 2 INCHES AND GREATER MEASURED 1 FOOT OFF THE GROUND WERE INVENTORIED FOR HEALTH AND VIABILITY. SHRUBS LARGER THAN 3' WERE INVENTORIED. ONLY SPECIES TYPICALLY FOUND IN RIPARIAN HABITATS WERE INVENTORIED.
4. THE FINAL MITIGATION PLAN MAY VARY FROM THIS CONSERVATION PLAN.
5. INDIVIDUAL PLANT INVENTORY METHODOLOGY IS BASED ON PIMA COUNTY'S INVENTORY METHOD FOR CALIPER SIZE, HEIGHT, AND VIABILITY REQUIREMENTS. THIS METHOD WAS DISCUSSED AND APPROVED BY TOWN OF SAHUARITA STAFF AS AN ALTERNATIVE TO USING A RELEVE OR TRANSECT TO DETERMINE PLANT DENSITY.
6. SPECIES INVENTORIED IS BASED ON PIMA COUNTY'S LIST OF REGULATED RIPARIAN VEGETATION. PIMA COUNTY'S LIST WAS DISCUSSED AND APPROVED BY TOWN OF SAHUARITA STAFF IN CONJUNCTION WITH UTILIZING THE INDIVIDUAL PLANT INVENTORY.
7. DRAINAGE CHANNEL SECTIONS FOUND ON SHEET RH-10 ARE PRELIMINARY SECTIONS DESIGNED BY RICK ENGINEERING. FINAL DESIGN COMPLETED DURING THE DEVELOPMENT PLAN PROCESS MAY VARY FROM WHAT IS SHOWN IN THIS CONSERVATION PLAN. VARIATIONS MAY INCLUDE SURFACE TREATMENTS, CHANNEL WIDTHS AND CHANNEL DEPTHS.

SITE ASSESSMENT:

1. THE EXISTING XERORIPARIAN 'C' IS IN A STATE OF DECLINE DUE TO CHANGING WATER PATTERNS. MOST TREES ARE SEVERELY DISTRESSED RESULTING IN DIE BACK, DEAD TRUNKS AND MAIN BRANCHES, AND VERY POOR OVERALL HEALTH.
2. CHANNELIZATION AND BREAKOUT FLOWS HAVE LIMITED THE CONCENTRATION OF WATER IN THE NORTHERN PORTION OF THE EXISTING XERORIPARIAN 'C' AREA TO SHEET FLOW FROM OFF-SITE SOURCES AND RESULTED IN NO REGENERATION AND A SEVERE DECLINE OF ALL PLANTS.
3. LITTLE TO NO REGENERATION OF YOUNG TREES AND SHRUBS IS PRESENT.
4. THE PREDOMINANT SPECIES FOUND ON-SITE IS CREOSOTE.

ENGINEERS ASSESSMENT:

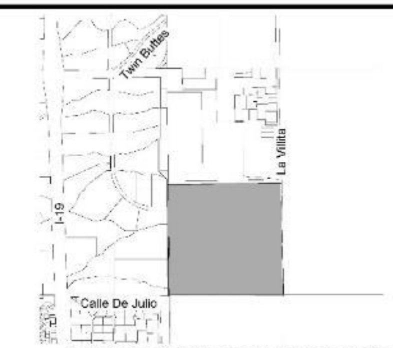
A NUMBER OF BRAIDED WASHES WEST OF THE PROJECT PRODUCE LARGE VOLUMES OF OFFSITE FLOWS WHICH CONVEY ACROSS THE WESTERN PROJECT BOUNDARY. ONCE ONSITE, THESE LARGE FLOW VOLUMES CONVEY EAST TO AN EXISTING MANMADE EARTHEN BERM, WHERE THE RIPARIAN AREA IS LOCATED. WHEN FLOWS REACH THE BERM, THEY EITHER BREAK THROUGH MULTIPLE BERM BREACHES AND CONTINUE EAST ACROSS THE SITE OR CONVEY NORTH ALONG THE WEST SIDE OF THE BERM. BRAIDED WASHES ARE KNOWN FOR RAPID AND FREQUENT PEAK FLOW VARIATIONS; AS A RESULT, PEAK FLOW VOLUMES THROUGH EXISTING BERM BREACHES AND ALONG THE BERM WILL NOT BE CONSISTENT. THE MANMADE EARTHEN BERM HAS NO STRUCTURAL INTEGRITY AND SHOULD NOT BE USED FOR A SAFE FLOOD CONTROL SOLUTION. THE BERM MUST BE REMOVED AND REPLACED BY AN ENGINEERED DRAINAGE STRUCTURE TO CONTROL INCONSISTENT FLOW VOLUMES AND SAFELY PROTECT DOWNSTREAM DEVELOPMENT FROM FLOODING.

Riparian Habitat Inventory Summary

	Species		Inventory Numbers		
	Scientific Name	Common Name	Viable	Non-Viable	Total
Shrubs					
	Acacia Constricta	Whitethorn Acacia	20	1	21
	Acacia Greggii	Catclaw Acacia	7	3	10
	Celtis Pallida	Desert Hackberry	31	0	31
	Ziziphus Obtusifolia	Greythorn	4	1	5
		Shrub Totals	**62**	**5**	**67**
Trees					
	Acacia Constricta	Whitethorn Acacia	20	2	22
	Acacia Greggii	Catclaw Acacia	8	1	9
	Cercidium Floridum	Blue Palo Verde	18	5	23
	Cercidium Microphyllum	Foothills Palo Verde	14	0	14
	Prosopis Velutina	Velvet Mesquite	264	186	450
		Tree Totals	**324**	**194**	**518**
Other	*Yucca Elata*	Soaptree Yucca	1	0	1
		Other Totals	1	0	1

INVENTORY SUMMARY NOTES:

1. **PLANTS SHOWN ON SHEET RH-5 WERE INVENTORIED VIA AERIAL PHOTO. SPECIES, SIZE, CALIPER, VIABILITY AND TRANSPLANTABILITY ARE TO BE DETERMINED.**
2. **THE NUMBER OF PLANTS SHOWN ON SHEET RH-5 MAY INCREASE OR DECREASE WHEN INVENTORIED.**
3. **ALL PLANTS FOUND IN RH-5 AREA SHALL BE INVENTORIED IN A MANNER CONSISTENT WITH THOSE INVENTORIED ON THE REST OF THE SITE.**



SECTION 24, TOWNSHIP 17 SOUTH RANGE 13 EAST, G&SRB&M TOWN OF SAHUARITA, ARIZONA

LOCATION MAP
SCALE: 3" = 1 MILE

SHEET INDEX:

COVER	THIS SHEET
RIPARIAN INVENTORY	RH-2
RIPARIAN INVENTORY	RH-3
RIPARIAN INVENTORY	RH-4
RIPARIAN INVENTORY	RH-5
INVENTORY LIST	RH-6
INVENTORY LIST	RH-7
INVENTORY LIST	RH-8
CONSERVATION PLAN	RH-9
SECTIONS	RH-10

SUBMITTAL HISTORY:

1ST SUBMITTAL	12/05/19	TOWN OF SAHUARITA
2ND SUBMITTAL	01/30/2020	TOWN OF SAHUARITA

PUBLIC WORKS DIRECTOR: DATE

PLANNING AND BUILDING DIRECTOR: DATE

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1	REVISED PER COMMENTS	1/30/2020

ENGINEER:
RICK ENGINEERING
3945 E FORT LOWELL RD
TEL: 520-795-9000
ATTN: COREY THOMPSON

PLANNER:
THE PLANNING CENTER
2 E CONGRESS #600
TEL: 520-623-6146
ATTN: BRIAN UNDERWOOD

OWNER/DEVELOPER:
GREEN VALLEY 28, LLP
2776 E VIRGINIA ST
TEL: 602-689-0128
ATTN: KRIS HARMON

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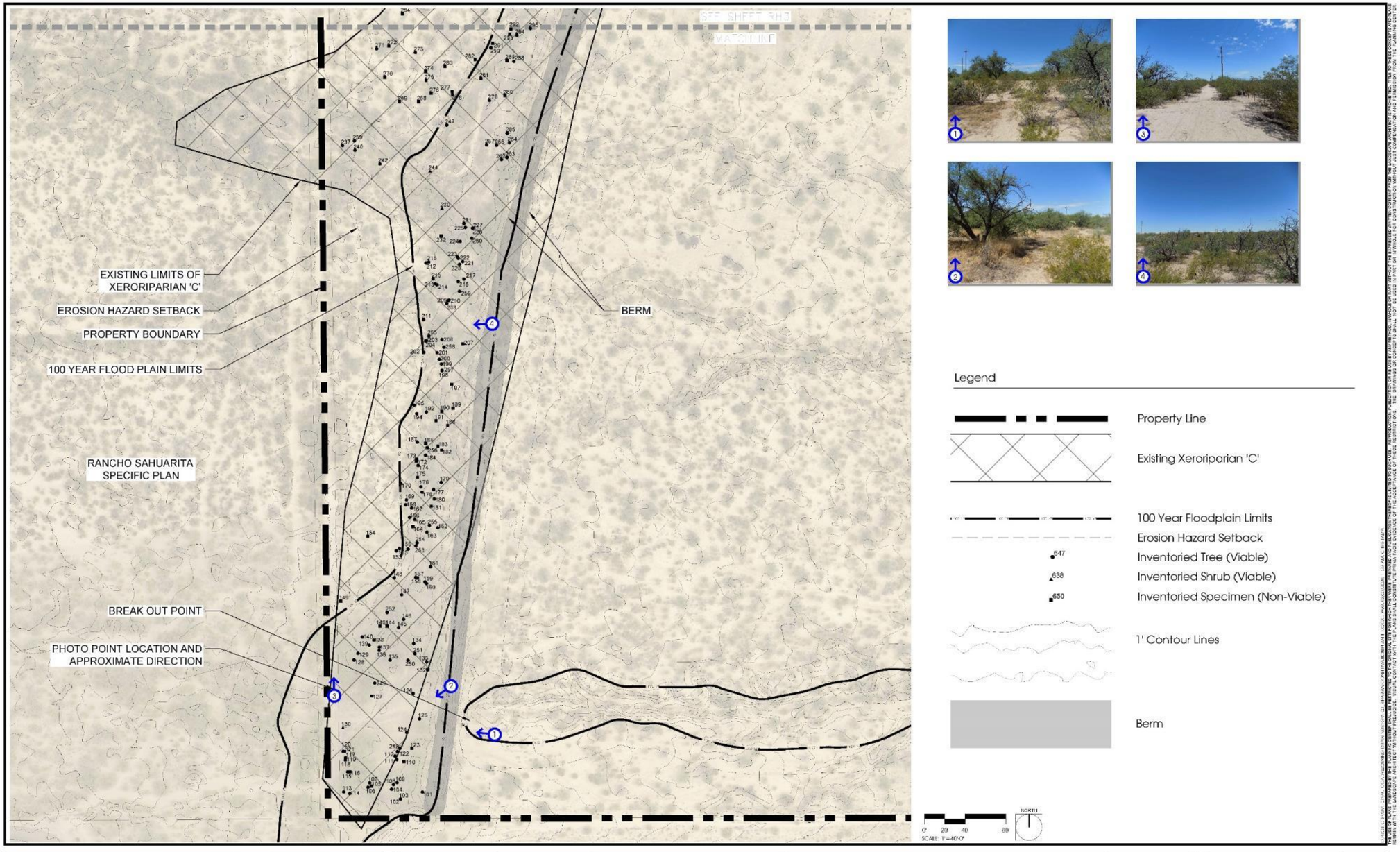
LA VILLITA
RIPARIAN HABITAT CONSERVATION PLAN
SA12-19-00007

CASE NO: SA12-1900007
REFERENCE:
COVER
1 OF 10



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RIPARIAN INVENTORY

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REGISTERED LANDSCAPE ARCHITECT
PRELIMINARY
NOT FOR CONSTRUCTION
RECORDATION
STATE OF ARIZONA U.S.A.
EXPIRES 06/30/20

LA VILLITA
RIPARIAN HABITAT CONSERVATION PLAN
SA12-19-00007

CASE NO: SA12-1900007
REFERENCE:
RH-2
2 OF 10

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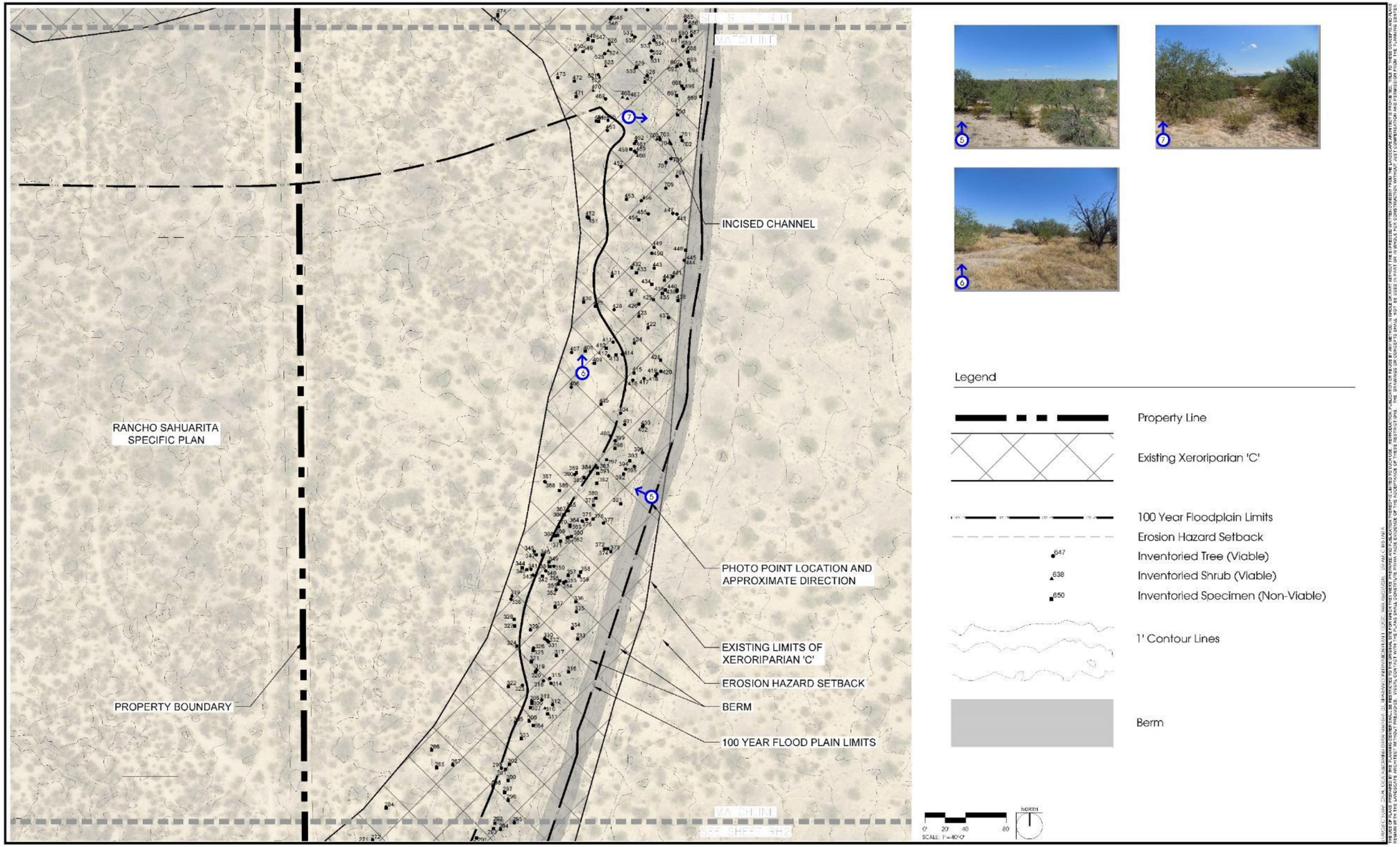

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#	REVISIONS/SUBMITTALS	DATE
1	REVISED PER COMMENTS	1/30/2020

RIPARIAN INVENTORY

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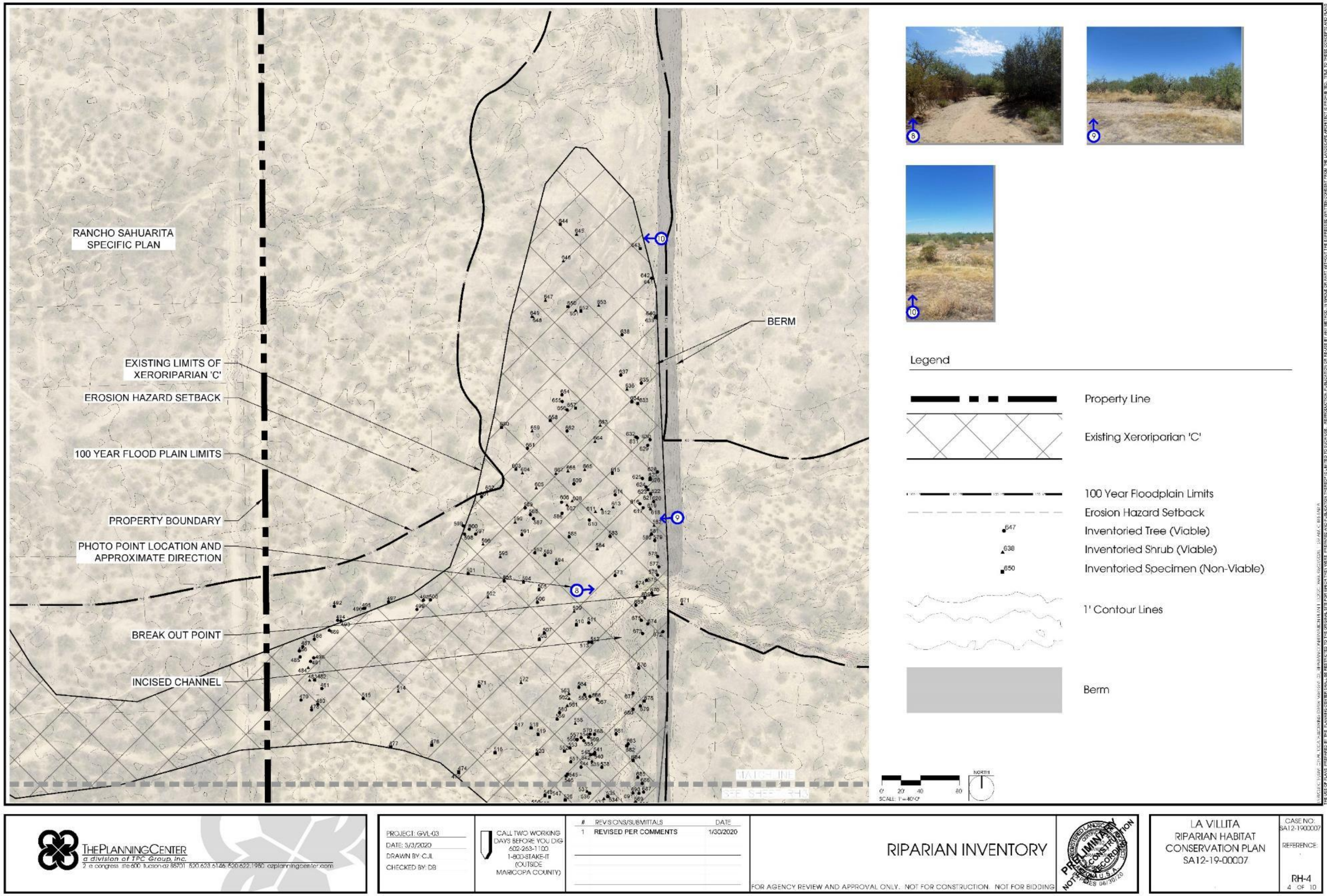
LA VILLITA
RIPARIAN HABITAT
CONSERVATION PLAN
SA12-19-00007

CASE NO.
SA12-1900007
REFERENCE:
RH-3
3 OF 10


RANCHO SAHUARITA
SPECIFIC PLAN
EXISTING LIMITS OF
XERORIPARIAN 'C'
EROSION HAZARD SETBACK
100 YEAR FLOOD PLAIN LIMITS
PROPERTY BOUNDARY
PHOTO POINT LOCATION AND
APPROXIMATE DIRECTION
BREAK OUT POINT
INCISED CHANNEL
BERM
Legend
Property Line
Existing Xeroriparian 'C'
100 Year Floodplain Limits
Erosion Hazard Setback
Inventoried Tree (Viable)
Inventoried Shrub (Viable)
Inventoried Specimen (Non-Viable)
1' Contour Lines
Berm
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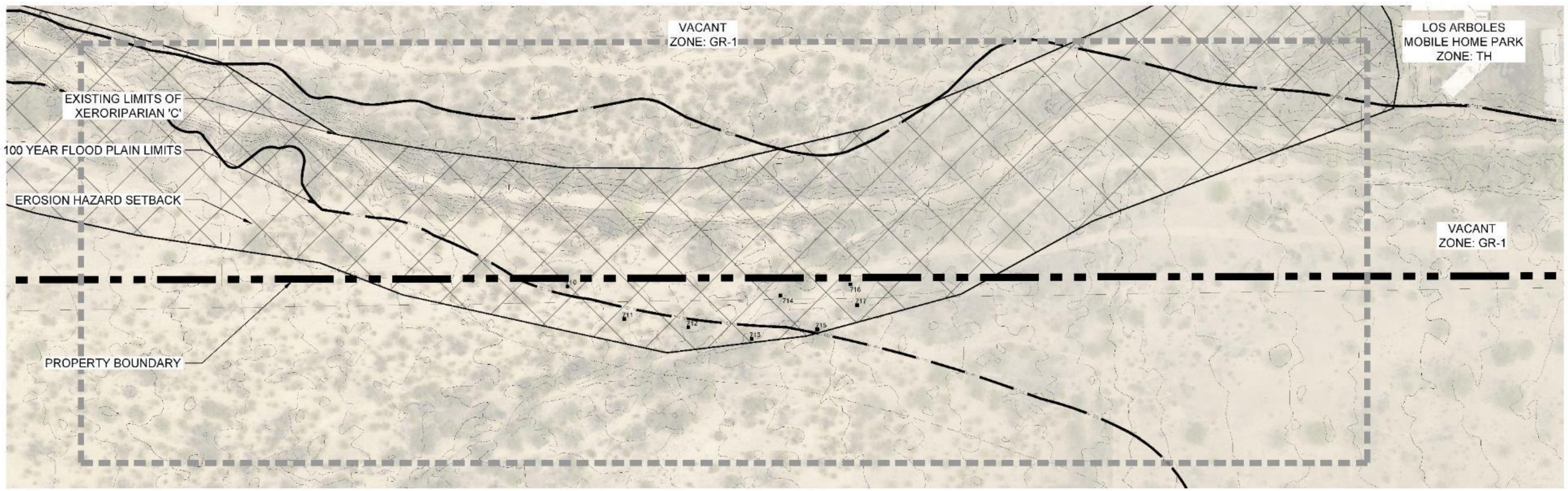
LA VILLITA
RIPARIAN HABITAT
CONSERVATION PLAN
SA12-19-00007
CASE NO.
SA12-1900007
REFERENCE:
RH-4
4 OF 10



INVENTORY SUMMARY NOTES:

1. PLANTS SHOWN ON THIS SHEET WERE INVENTORIED VIA AIR PHOTO. SPECIES, SIZE, CALIPER, VIABILITY AND TRANSPLANTABILITY ARE TO BE DETERMINED.
2. THE NUMBER OF PLANTS SHOWN ON THIS SHEET MAY INCREASE OR DECREASE WHEN INVENTORIED.
3. ALL PLANTS FOUND IN THIS AREA SHALL BE INVENTORIED IN A MANNER CONSISTENT WITH THOSE INVENTORIED ON THE REST OF THE SITE.

SCALE: 1" = 40'-0"

NORTH

Legend

- Property Line
- Existing Xeroriparian 'C'
- 100 Year Floodplain Limits
- Erosion Hazard Setback
- 647 Inventoried Tree (Viable)
- 638 Inventoried Shrub (Viable)
- 650 Inventoried Specimen (Non-Viable)
- 1' Contour Lines
- Berm

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RIPARIAN INVENTORY

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LA VILLITA
RIPARIAN HABITAT CONSERVATION PLAN
SA12-19-00007

CASE NO: SA12-1900007
REFERENCE:
RH-5
5 OF 10

RIPARIAN HABITAT INVENTORY

NUMBER	SCIENTIFIC NAME	HEIGHT	CALIPER	TRUNK	VIABILITY	TRANSPLANT	DISPOSITION	NOTE1	NOTE2
101	PROSOPIS VELUTINA	16	11	MULTI	MEDIUM	LOW	PIP	.	.
102	PROSOPIS VELUTINA	13	4	MULTI	HIGH	LOW	PIP	.	.
103	PROSOPIS VELUTINA	16	9	MULTI	LOW	LOW	PIP	MISTLETOE	.
104	PROSOPIS VELUTINA	12	6	MULTI	HIGH	LOW	PIP	.	.
105	PROSOPIS VELUTINA	13	45	MULTI	LOW	LOW	NV	FELL OVER	.
106	PROSOPIS VELUTINA	15	16	SINGLE	MEDIUM	LOW	PIP	MISTLETOE	.
107	PROSOPIS VELUTINA	13	10	SINGLE	MEDIUM	LOW	PIP	MISTLETOE	.
108	PROSOPIS VELUTINA	10	8	MULTI	HIGH	LOW	PIP	.	.
109	PROSOPIS VELUTINA	11	6	SINGLE	HIGH	LOW	PIP	.	.
110	PROSOPIS VELUTINA	9	5	SINGLE	LOW	LOW	NV	DAMAGED	DEAD LIMB
111	PROSOPIS VELUTINA	11	3	SINGLE	HIGH	LOW	PIP	.	.
112	PROSOPIS VELUTINA	11	6	MULTI	HIGH	LOW	PIP	.	.
113	PROSOPIS VELUTINA	9	3	MULTI	MEDIUM	LOW	PIP	.	.
114	PROSOPIS VELUTINA	11	5	SINGLE	HIGH	LOW	PIP	.	.
115	PROSOPIS VELUTINA	12	4	SINGLE	HIGH	LOW	PIP	.	.
116	PROSOPIS VELUTINA	10	5	SINGLE	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
117	PROSOPIS VELUTINA	11	6	SINGLE	MEDIUM	LOW	PIP	.	.
118	PROSOPIS VELUTINA	16	18	MULTI	MEDIUM	LOW	PIP	.	.
119	PROSOPIS VELUTINA	13	7	SINGLE	MEDIUM	LOW	PIP	DIEBACK	.
120	PROSOPIS VELUTINA	14	11	MULTI	LOW	LOW	NV	DIEBACK	DEAD LIMB
121	PROSOPIS VELUTINA	13	4	SINGLE	HIGH	LOW	PIP	.	.
122	PROSOPIS VELUTINA	10	4	MULTI	HIGH	LOW	PIP	.	.
123	PROSOPIS VELUTINA	11	11	MULTI	LOW	LOW	NV	DIEBACK	.
124	PROSOPIS VELUTINA	11	7	MULTI	MEDIUM	LOW	PIP	.	.
125	PROSOPIS VELUTINA	16	30	MULTI	MEDIUM	LOW	PIP	DEAD LIMB	.
126	PROSOPIS VELUTINA	12	9	MULTI	MEDIUM	LOW	PIP	BROKEN LIMB	.
127	PROSOPIS VELUTINA	15	20	MULTI	LOW	LOW	NV	BROKEN LIMB	DIEBACK
128	CELTIS PALLIDA	10	6	MULTI	HIGH	LOW	PIP	.	.
129	PROSOPIS VELUTINA	13	15	MULTI	HIGH	LOW	PIP	.	.
130	YUCCA ELATA	8	0	SINGLE	HIGH	LOW	PIP	.	.
132	PROSOPIS VELUTINA	15	20	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
133	PROSOPIS VELUTINA	19	37	MULTI	MEDIUM	LOW	PIP	BROKEN LIMB	.
134	PROSOPIS VELUTINA	11	9	MULTI	HIGH	LOW	PIP	.	.
135	CELTIS PALLIDA	10	6	MULTI	HIGH	LOW	PIP	.	.
136	PROSOPIS VELUTINA	12	7	MULTI	MEDIUM	LOW	PIP	DIEBACK	.
137	PROSOPIS VELUTINA	9	3	SINGLE	MEDIUM	LOW	PIP	.	.
138	PROSOPIS VELUTINA	11	6	SINGLE	MEDIUM	LOW	PIP	.	.
139	PROSOPIS VELUTINA	13	9	SINGLE	HIGH	LOW	PIP	.	.
140	PROSOPIS VELUTINA	16	10	SINGLE	HIGH	LOW	PIP	.	.
143	PROSOPIS VELUTINA	12	16	SINGLE	LOW	LOW	NV	.	.
144	PROSOPIS VELUTINA	15	9	SINGLE	LOW	LOW	NV	.	.
145	PROSOPIS VELUTINA	17	8	SINGLE	MEDIUM	LOW	PIP	.	.
146	PROSOPIS VELUTINA	8	5	MULTI	MEDIUM	LOW	PIP	.	.
147	PROSOPIS VELUTINA	10	8	MULTI	MEDIUM	LOW	PIP	.	.
148	PROSOPIS VELUTINA	9	6	SINGLE	MEDIUM	LOW	PIP	.	.
149	PROSOPIS VELUTINA	8	5	SINGLE	LOW	LOW	NV	.	.
153	PROSOPIS VELUTINA	11	19	MULTI	HIGH	HIGH	PIP	.	.
154	PROSOPIS VELUTINA	8	1	MULTI	LOW	HIGH	NV	DIEBACK	.
155	PROSOPIS VELUTINA	15	7	MULTI	MEDIUM	LOW	PIP	DIEBACK	.
156	PROSOPIS VELUTINA	13	12	MULTI	MEDIUM	LOW	PIP	DAMAGED	.
157	PROSOPIS VELUTINA	9	5	MULTI	MEDIUM	LOW	PIP	DAMAGED	.
158	PROSOPIS VELUTINA	7	4	MULTI	MEDIUM	LOW	PIP	DIEBACK	.
159	PROSOPIS VELUTINA	15	18	MULTI	MEDIUM	LOW	PIP	DIEBACK	.
160	PROSOPIS VELUTINA	18	20	MULTI	MEDIUM	LOW	PIP	DIEBACK	.
161	PROSOPIS VELUTINA	8	5	MULTI	MEDIUM	LOW	PIP	DEAD LIMB	.
162	PROSOPIS VELUTINA	9	9	MULTI	MEDIUM	LOW	PIP	.	.
163	PROSOPIS VELUTINA	15	10	MULTI	MEDIUM	LOW	PIP	.	.
164	PROSOPIS VELUTINA	9	6	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
165	PROSOPIS VELUTINA	10	9	MULTI	MEDIUM	LOW	PIP	.	.
166	PROSOPIS VELUTINA	9	4	SINGLE	MEDIUM	LOW	PIP	.	.
167	PROSOPIS VELUTINA	12	8	SINGLE	MEDIUM	LOW	PIP	.	.
168	PROSOPIS VELUTINA	9	7	SINGLE	MEDIUM	LOW	PIP	.	.
169	PROSOPIS VELUTINA	8	4	SINGLE	MEDIUM	LOW	PIP	.	.
170	PROSOPIS VELUTINA	10	13	MULTI	MEDIUM	LOW	PIP	.	.
172	PROSOPIS VELUTINA	11	10	MULTI	LOW	LOW	NV	.	.
173	PROSOPIS VELUTINA	7	5	SINGLE	LOW	LOW	NV	.	.
174	PROSOPIS VELUTINA	9	7	SINGLE	MEDIUM	LOW	PIP	.	.
175	PROSOPIS VELUTINA	8	4	SINGLE	LOW	LOW	NV	.	.
176	PROSOPIS VELUTINA	11	9	MULTI	MEDIUM	LOW	PIP	.	.
177	PROSOPIS VELUTINA	15	11	MULTI	MEDIUM	LOW	PIP	.	.
178	PROSOPIS VELUTINA	10	11	MULTI	MEDIUM	LOW	PIP	.	.
179	PROSOPIS VELUTINA	15	11	MULTI	MEDIUM	LOW	PIP	.	.
180	PROSOPIS VELUTINA	10	16	MULTI	MEDIUM	LOW	PIP	.	.
181	PROSOPIS VELUTINA	6	6	MULTI	LOW	LOW	NV	.	.
182	PROSOPIS VELUTINA	9	7	MULTI	LOW	LOW	NV	.	.
183	PROSOPIS VELUTINA	8	12	MULTI	LOW	LOW	NV	.	.
184	PROSOPIS VELUTINA	7	6	MULTI	MEDIUM	LOW	PIP	.	.
186	PROSOPIS VELUTINA	7	0	SINGLE	LOW	LOW	NV	.	.
187	PROSOPIS VELUTINA	7	8	SINGLE	LOW	LOW	PIP	.	.
188	PROSOPIS VELUTINA	6	5	SINGLE	LOW	LOW	NV	DIEBACK	.
189	PROSOPIS VELUTINA	6	6	SINGLE	LOW	LOW	NV	DIEBACK	.
190	PROSOPIS VELUTINA	8	6	SINGLE	LOW	LOW	NV	DIEBACK	.
191	PROSOPIS VELUTINA	7	4	SINGLE	LOW	LOW	NV	DIEBACK	.
192	PROSOPIS VELUTINA	7	4	SINGLE	MEDIUM	LOW	PIP	DAMAGED	.
194	PROSOPIS VELUTINA	9	5	MULTI	MEDIUM	LOW	PIP	DIEBACK	.
195	PROSOPIS VELUTINA	7	3	MULTI	MEDIUM	LOW	PIP	BROKEN LIMB	.
197	PROSOPIS VELUTINA	0	8	SINGLE	LOW	LOW	NV	DIEBACK	.
198	PROSOPIS VELUTINA	12	9	MULTI	MEDIUM	LOW	PIP	.	.
199	PROSOPIS VELUTINA	110	10	MULTI	MEDIUM	LOW	PIP	BARK BEETLE	.
200	PROSOPIS VELUTINA	9	4	SINGLE	MEDIUM	LOW	PIP	BARK BEETLE	.
201	PROSOPIS VELUTINA	13	11	MULTI	MEDIUM	LOW	PIP	.	.
202	PROSOPIS VELUTINA	10	6	MULTI	MEDIUM	LOW	PIP	.	.
203	PROSOPIS VELUTINA	9	3	MULTI	MEDIUM	LOW	PIP	.	.
204	PROSOPIS VELUTINA	7	4	MULTI	MEDIUM	LOW	PIP	.	.
205	PROSOPIS VELUTINA	9	26	MULTI	MEDIUM	LOW	PIP	.	.

RIPARIAN HABITAT INVENTORY

NUMBER	SCIENTIFIC NAME	HEIGHT	CALIPER	TRUNK	VIABILITY	TRANSPLANT	DISPOSITION	NOTE1	NOTE2
206	PROSOPIS VELUTINA	11	16	MULTI	MEDIUM	LOW	PIP	.	.
207	PROSOPIS VELUTINA	7	9	MULTI	LOW	LOW	NV	DEAD LIMB	.
208	PROSOPIS VELUTINA	10	4	SINGLE	MEDIUM	LOW	PIP	.	.
209	PROSOPIS VELUTINA	11	12	MULTI	MEDIUM	LOW	PIP	.	.
210	PROSOPIS VELUTINA	10	16	MULTI	MEDIUM	LOW	PIP	.	.
211	PROSOPIS VELUTINA	8	10	MULTI	MEDIUM	LOW	PIP	.	.
212	PROSOPIS VELUTINA	9	6	MULTI	MEDIUM	LOW	PIP	.	.
213	PROSOPIS VELUTINA	12	8	MULTI	MEDIUM	LOW	PIP	.	.
214	PROSOPIS VELUTINA	9	7	MULTI	MEDIUM	LOW	PIP	.	.
215	PROSOPIS VELUTINA	10	9	MULTI	MEDIUM	LOW	PIP	.	.
216	PROSOPIS VELUTINA	12	11	MULTI	MEDIUM	LOW	PIP	.	.
217	ACACIA CONSTRICTA	12	5	MULTI	HIGH	LOW	PIP	.	.
218	ACACIA CONSTRICTA	13	8	MULTI	HIGH	LOW	PIP	.	.
220	ACACIA CONSTRICTA	7	5	MULTI	HIGH	LOW	PIP	.	.
221	PROSOPIS VELUTINA	14	16	MULTI	HIGH	LOW	PIP	.	.
222	PROSOPIS VELUTINA	10	7	MULTI	MEDIUM	LOW	PIP	.	.
223	PROSOPIS VELUTINA	9	5	MULTI	MEDIUM	LOW	PIP	.	.
224	PROSOPIS VELUTINA	10	8	MULTI	MEDIUM	LOW	PIP	.	.
225	PROSOPIS VELUTINA	12	12	MULTI	MEDIUM	LOW	PIP	.	.
226	PROSOPIS VELUTINA	10	4	MULTI	HIGH	LOW	PIP	.	.
227	PROSOPIS VELUTINA	11	10	MULTI	MEDIUM	LOW	PIP	.	.
230	CELTIS PALLIDA	7	0	MULTI	HIGH	LOW	PIP	.	.
232	PROSOPIS VELUTINA	12	9	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
237	PROSOPIS VELUTINA	6	5	MULTI	LOW	LOW	PIP	.	.
239	PROSOPIS VELUTINA	8	6	MULTI	MEDIUM	LOW	PIP	.	.
240	PROSOPIS VELUTINA	5	7	MULTI	LOW	LOW	PIP	.	.
242	ACACIA GREGGII	7	3	MULTI	MEDIUM	LOW	PIP	.	.
244	CELTIS PALLIDA	8	0	MULTI	HIGH	LOW	PIP	.	.
247	PROSOPIS VELUTINA	9	11	MULTI	MEDIUM	LOW	PIP	.	.
248	PROSOPIS VELUTINA	8	2	SINGLE	HIGH	LOW	PIP	.	.
249	CERCIDIUM FLORIDUM	8	2	MULTI	HIGH	LOW	PIP	.	.
250	PROSOPIS VELUTINA	9	3	MULTI	HIGH	LOW	PIP	.	.
251	PROSOPIS VELUTINA	6	2	MULTI	MEDIUM	LOW	PIP	.	.
252	PROSOPIS VELUTINA	9	3	MULTI	MEDIUM	LOW	PIP	.	.
253	PROSOPIS VELUTINA	10	4	SINGLE	MEDIUM	LOW	PIP	.	.
254	PROSOPIS VELUTINA	6	2	MULTI	MEDIUM	LOW	PIP	.	.
255	PROSOPIS VELUTINA	6	3	MULTI	MEDIUM	LOW	PIP	.	.
256	PROSOPIS VELUTINA	7	3	MULTI	MEDIUM	LOW	PIP	.	.
257	PROSOPIS VELUTINA	7	3	MULTI	MEDIUM	LOW	PIP	.	.
258	PROSOPIS VELUTINA	7	4	MULTI	MEDIUM	LOW	PIP	.	.
259	ACACIA CONSTRICTA	6	4	MULTI	MEDIUM	LOW	PIP	.	.
260	ACACIA CONSTRICTA	8	2	MULTI	HIGH	LOW	PIP	.	.
261	PROSOPIS VELUTINA	14	19	MULTI	MEDIUM	LOW	PIP	.	.
262	PROSOPIS VELUTINA	12	16	MULTI	MEDIUM	LOW	PIP	.	.
263	PROSOPIS VELUTINA	10	8	MULTI	MEDIUM	LOW	PIP	.	.
264	PROSOPIS VELUTINA	11	10	SINGLE	MEDIUM	LOW	PIP	.	.
265	PROSOPIS VELUTINA	14	8	SINGLE	MEDIUM	LOW	PIP	.	.
266	ACACIA CONSTRICTA	7	2	MULTI	HIGH	LOW	PIP	.	.
267	ACACIA CONSTRICTA	8	2	MULTI	HIGH	LOW	PIP	.	.
268	PROSOPIS VELUTINA	6	7	MULTI	LOW	LOW	NV	DEAD TRUNK	.
269	PROSOPIS VELUTINA	5	5	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
270	PROSOPIS VELUTINA	6	5	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
271	PROSOPIS VELUTINA	9	8	MULTI	MEDIUM	LOW	PIP	DIEBACK	.
272	PROSOPIS VELUTINA	8	26	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
273	PROSOPIS VELUTINA	4	6	MULTI	MEDIUM	LOW	PIP	.	DAMAGED
274	PROSOPIS VELUTINA	14	10	SINGLE	LOW	LOW	NV	DEAD TRUNK	DIEBACK
275	PROSOPIS VELUTINA	9	7	SINGLE	LOW	LOW	NV	DIEBACK	.
276	PROSOPIS VELUTINA	5	6	SINGLE	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
277	PROSOPIS VELUTINA	6	4	SINGLE	LOW	LOW	NV	BROKEN LIMB	DIEBACK
278	PROSOPIS VELUTINA	7	2	MULTI	HIGH	LOW	PIP	.	.
279	PROSOPIS VELUTINA	13	8	MULTI	MEDIUM	LOW	PIP	MISTLETOE	.
280	PROSOPIS VELUTINA	13	20	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
281	PROSOPIS VELUTINA	7	8	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
282	PROSOPIS VELUTINA	10	18	MULTI	LOW	LOW	NV	DIEBACK	DEAD LIMB
283	PROSOPIS VELUTINA	5	13	MULTI	LOW	LOW	NV	DIEBACK	DEAD LIMB
284	PROSOPIS VELUTINA	5	4	MULTI	LOW	LOW	NV	DIEBACK	.
285	PROSOPIS VELUTINA	9	19	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
286	PROSOPIS VELUTINA	6	8	MULTI	LOW	LOW	NV	DEAD LIMB	.
287	PROSOPIS VELUTINA	7	4	MULTI	LOW	LOW	PIP	.	.
288	PROSOPIS VELUTINA	7	5	MULTI	MEDIUM	LOW	PIP	.	.
289	PROSOPIS VELUTINA	7	6	MULTI	LOW	LOW	NV	DEAD LIMB	.
290	PROSOPIS VELUTINA	7	6	MULTI	MEDIUM	LOW	PIP	.	.
291	PROSOPIS VELUTINA	7	8	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
292	PROSOPIS VELUTINA	6	3	MULTI	MEDIUM	LOW	NV	DEAD LIMB	.
293	PROSOPIS VELUTINA	5	3	MULTI	MEDIUM	LOW	NV	DEAD LIMB	.
294	PROSOPIS VELUTINA	9	8	MULTI	MEDIUM	LOW	PIP	.	.
295	PROSOPIS VELUTINA	8	10	MULTI	MEDIUM	LOW	PIP	.	.
296	PROSOPIS VELUTINA	5	7	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
297	PROSOPIS VELUTINA	11	21	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
298	PROSOPIS VELUTINA	6	3	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
299	PROSOPIS VELUTINA	9	19	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
300	PROSOPIS VELUTINA	9	14	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
301	PROSOPIS VELUTINA	7	4	SINGLE	LOW	LOW	NV	DIEBACK	.
302	PROSOPIS VELUTINA	12	24	MULTI	LOW	LOW	NV	DIEBACK	DEAD TRUNK
303	PROSOPIS VELUTINA	110	16	MULTI	LOW	LOW	NV	DIEBACK	BROKEN LIMB
304	PROSOPIS VELUTINA	9	17	MULTI	LOW	LOW	NV	DIEBACK	DEAD TRUNK
305	PROSOPIS VELUTINA	8	20	MULTI	LOW	LOW	NV	DIEBACK	DEAD TRUNK
306	PROSOPIS VELUTINA	9	5	SINGLE	MEDIUM	LOW	NV	DIEBACK	.
307	PROSOPIS VELUTINA	10	10	MULTI	LOW	LOW	NV	DIEBACK	DEAD LIMB
308	PROSOPIS VELUTINA	8	1	MULTI	LOW	LOW	NV	DIEBACK	DEAD LIMB
309	PROSOPIS VELUTINA	10	7	MULTI	LOW	LOW	NV	DIEBACK	.
310	ZIZIPHUS OBTUSIFOLIA	7	0	MULTI	MEDIUM	LOW	PIP	.	.

RIPARIAN HABITAT INVENTORY

NUMBER	SCIENTIFIC NAME	HEIGHT	CALIPER	TRUNK	VIABILITY	TRANSPLANT	DISPOSITION	NOTE1	NOTE2
311	PROSOPIS VELUTINA	11	17	MULTI	LOW	LOW	NV	DEAD LIMB	DIEBACK
312	PROSOPIS VELUTINA	9	9	SINGLE	MEDIUM	LOW	PIP	DEAD LIMB	.
313	CERCIDIUM MICROPHYLLUM	8	4	MULTI	MEDIUM	LOW	PIP	.	.
314	PROSOPIS VELUTINA	13	18	SINGLE	MEDIUM	LOW	PIP	DIEBACK	.
315	CERCIDIUM MICROPHYLLUM	10	6	SINGLE	MEDIUM	LOW	PIP	DIEBACK	.
316	PROSOPIS VELUTINA	10	36	MULTI	LOW	LOW	NV	DIEBACK	DEAD LIMB
317	PROSOPIS VELUTINA	8	10	SINGLE	LOW	LOW	NV	DIEBACK	DAMAGED
318	PROSOPIS VELUTINA	9	11	MULTI	MEDIUM	LOW	PIP	DIEBACK	.
319	PROSOPIS VELUTINA	10	8	SINGLE	MEDIUM	LOW	PIP	DIEBACK	.
320	PROSOPIS VELUTINA	9	12	MULTI	LOW	LOW	NV	DIEBACK	DEAD LIMB
321	PROSOPIS VELUTINA	5	8	SINGLE	LOW	LOW	NV	DIEBACK	DEAD LIMB
322	PROSOPIS VELUTINA	7	8	MULTI	LOW	LOW	NV	DIEBACK	.
323	PROSOPIS VELUTINA	6	2	MULTI	MEDIUM	LOW	PIP	DAMAGED	.
324	PROSOPIS VELUTINA	8	26	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
325	PROSOPIS VELUTINA	10	16	MULTI	LOW	LOW	NV	DIEBACK	DEAD TRUNK
326	PROSOPIS VELUTINA	6	4	MULTI	LOW	LOW	PIP	.	.
327	PROSOPIS VELUTINA	9	16	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
328	PROSOPIS VELUTINA	10	16	MULTI	LOW	LOW	NV	DAMAGED	DEAD LIMB
329	PROSOPIS VELUTINA	9	12	MULTI	MEDIUM	LOW	PIP	DAMAGED	.
330	PROSOPIS VELUTINA	8	6	MULTI	MEDIUM	LOW	PIP	DAMAGED	.
331	PROSOPIS VELUTINA	9	9	MULTI	MEDIUM	LOW	PIP	BROKEN LIMB	.
332	PROSOPIS VELUTINA	9	4	MULTI	MEDIUM	LOW	PIP	.	.
333	PROSOPIS VELUTINA	6	9	MULTI	LOW	LOW	NV	DEAD LIMB	DIEBACK
334	PROSOPIS VELUTINA	9	8	MULTI	MEDIUM	LOW	PIP	DEAD LIMB	.
335	PROSOPIS VELUTINA	10	7	MULTI	MEDIUM	LOW	PIP	BROKEN LIMB	.
336	PROSOPIS VELUTINA	11	10	SINGLE	LOW	LOW	NV	DAMAGED	DIEBACK
337	PROSOPIS VELUTINA	10	7	MULTI	LOW	LOW	NV	DAMAGED	DIEBACK
338	PROSOPIS VELUTINA	9	10	MULTI	MEDIUM	LOW	PIP	.	DIEBACK
339	PROSOPIS VELUTINA	8	8	MULTI	MEDIUM	LOW	PIP	.	.
340	PROSOPIS VELUTINA	6	7	MULTI	LOW	LOW	NV	DIEBACK	.
341	PROSOPIS VELUTINA	8	8	SINGLE	LOW	LOW	PIP	DEAD LIMB	.
342	PROSOPIS VELUTINA	10	14	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
343	PROSOPIS VELUTINA	9	11	MULTI	LOW	LOW	PIP	.	DEAD LIMB
344	PROSOPIS VELUTINA	10	10	SINGLE	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
345	PROSOPIS VELUTINA	7	2	SINGLE	HIGH	LOW	PIP	.	.
346	PROSOPIS VELUTINA	9	10	SINGLE	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
347	PROSOPIS VELUTINA	8	3	SINGLE	MEDIUM	LOW	PIP	DAMAGED	.
348	PROSOPIS VELUTINA	7	3	SINGLE	MEDIUM	LOW	PIP	DAMAGED	.
349	PROSOPIS VELUTINA	9	92	MULTI	LOW	LOW	NV	DIEBACK	.
350	PROSOPIS VELUTINA	8	6	MULTI	MEDIUM	LOW	PIP	.	.
351	PROSOPIS VELUTINA	7	9	MULTI	LOW	LOW	NV	DIEBACK	.
352	PROSOPIS VELUTINA	7	4	MULTI	MEDIUM	LOW	PIP	.	.
353	PROSOPIS VELUTINA	6	6	MULTI	LOW	LOW	NV	DAMAGED	DIEBACK
354	PROSOPIS VELUTINA	8	6	MULTI	LOW	LOW	NV	DAMAGED	DIEBACK
355	PROSOPIS VELUTINA	10	6	SINGLE	MEDIUM	LOW	PIP	DAMAGED	.
356	PROSOPIS VELUTINA	8	5	SINGLE	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
357	PROSOPIS VELUTINA	7	5	SINGLE	LOW	LOW	NV	DEAD TRUNK	DIEBACK
358	PROSOPIS VELUTINA	10	12	MULTI	LOW	LOW	NV	.	DIEBACK
359	PROSOPIS VELUTINA	6	10	MULTI	LOW	LOW	NV	DEAD LIMB	DIEBACK
360	PROSOPIS VELUTINA	11	12	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
361	PROSOPIS VELUTINA	9	7	MULTI	LOW	LOW	PIP	DAMAGED	.
362	PROSOPIS VELUTINA	8	5	MULTI	LOW	LOW	PIP	DAMAGED	.
363	PROSOPIS VELUTINA	11	6	MULTI	LOW	LOW	PIP	.	.
364	PROSOPIS VELUTINA	10	17	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
365	PROSOPIS VELUTINA	10	11	MULTI	LOW	LOW	NV	DEAD LIMB	DIEBACK
366	PROSOPIS VELUTINA	12	9	MULTI	LOW	LOW	NV	DEAD LIMB	DIEBACK
367	PROSOPIS VELUTINA	8	6	MULTI	LOW	LOW	NV	DEAD LIMB	DIEBACK
368	PROSOPIS VELUTINA	7	3	MULTI	LOW	LOW	NV	DEAD TRUNK	DIEBACK
369	PROSOPIS VELUTINA	9	11	MULTI	LOW	LOW	NV	DEAD TRUNK	DIEBACK
370	PROSOPIS VELUTINA	9	20	MULTI	LOW	LOW	NV	DEAD TRUNK	DIEBACK
371	PROSOPIS VELUTINA	10	7	MULTI	LOW	LOW	NV	DEAD LIMB	DIEBACK
372	PROSOPIS VELUTINA	11	18	SINGLE	LOW	LOW	NV	MISTLETOE	DIEBACK
373	PROSOPIS VELUTINA	9	8	MULTI	LOW	LOW	NV	DAMAGED	DIEBACK
374	PROSOPIS VELUTINA	8	6	SINGLE	LOW	LOW	NV	DAMAGED	DIEBACK
375	PROSOPIS VELUTINA	9	5	MULTI	MEDIUM	LOW	PIP	DAMAGED	.
376	PROSOPIS VELUTINA	10	9	SINGLE	LOW	LOW	PIP	DAMAGED	.
377	PROSOPIS VELUTINA	11	5	SINGLE	LOW	LOW	PIP	DAMAGED	.
378	PROSOPIS VELUTINA	9	10	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
379	PROSOPIS VELUTINA	8	12	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
380	PROSOPIS VELUTINA	10	9	MULTI	LOW	LOW	NV	DIEBACK	.
381	PROSOPIS VELUTINA	14	16	MULTI	LOW	LOW	NV	DEAD TRUNK	.
382	PROSOPIS VELUTINA	18	39	MULTI	LOW	LOW	NV	DIEBACK	.
383	PROSOPIS VELUTINA	6	4	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
384	PROSOPIS VELUTINA	6	4	MULTI	HIGH	LOW	PIP	.	.
385	PROSOPIS VELUTINA	6	4	MULTI	LOW	LOW	NV	DIEBACK	.
386	PROSOPIS VELUTINA	8	6	MULTI	LOW	LOW	NV	DIEBACK	.
387	PROSOPIS VELUTINA	5	5	MULTI	MEDIUM	LOW	PIP	.	.
388	PROSOPIS VELUTINA	8	9	MULTI	LOW	LOW	PIP	.	.
389	PROSOPIS VELUTINA	5	7	MULTI	LOW	LOW	NV	DEAD TRUNK	.
390	PROSOPIS VELUTINA	7	7	MULTI	LOW	LOW	PIP	DEAD LIMB	.
391	PROSOPIS VELUTINA	8	6	MULTI	LOW	LOW	NV	DIEBACK	.
392	PROSOPIS VELUTINA	13	18	MULTI	MEDIUM	LOW	PIP	.	.
393	PROSOPIS VELUTINA	111	14	MULTI	LOW	LOW	NV	DIEBACK	.
394	PROSOPIS VELUTINA	9	7	MULTI	MEDIUM	LOW	PIP	.	.
395	PROSOPIS VELUTINA	7	6	MULTI	MEDIUM	LOW	PIP	.	.
396	PROSOPIS VELUTINA	7	5	MULTI	MEDIUM	LOW	PIP	.	.
397	PROSOPIS VELUTINA	8	3	MULTI	LOW	LOW	NV	DEAD TRUNK	.
398	PROSOPIS VELUTINA	14	11	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
399	PROSOPIS VELUTINA	4	3	MULTI	LOW	LOW	PIP	.	.
400	PROSOPIS VELUTINA	12	9	MULTI	MEDIUM	LOW	PIP	.	.

PIP = Preserve in Place

NV = Not Viable

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PROJECT: GVL-03
DATE: 3/3/2020
DRAWN BY: CJL
CHECKED BY: DB

CALL TWO WORKING
DAYS BEFORE YOU DIG
602-263-1100
1-800-STAKE-IT
(OUTSIDE
MARICOPA COUNTY)

#	REVISIONS/SUBMITTALS	DATE
1	REVISED PER COMMENTS	1/30/2020

INVENTORY LIST

FOR AGENCY REVIEW AND APPROVAL ONLY. NOT FOR CONSTRUCTION. NOT FOR BIDDING

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING
EXPIRES 06/30/20

LA VILLITA
RIPARIAN HABITAT
CONSERVATION PLAN
SA12-19-00007

CASE NO:
SA12-1900007

REFERENCE:

RH-6
6 OF 10

RIPARIAN HABITAT INVENTORY

NUMBER	SCIENTIFIC NAME	HEIGHT	CALIPER	TRUNK	VIABILITY	TRANSPLANT	DISPOSITION	NOTE1	NOTE2
401	PROSOPIS VELUTINA	13	99	MULTI	MEDIUM	LOW	PIP	.	.
402	PROSOPIS VELUTINA	13	20	MULTI	MEDIUM	LOW	PIP	.	.
403	PROSOPIS VELUTINA	13	9	MULTI	LOW	LOW	NV	DIEBACK	.
404	PROSOPIS VELUTINA	16	27	MULTI	MEDIUM	LOW	PIP	.	.
405	PROSOPIS VELUTINA	6	7	MULTI	LOW	LOW	NV	DIEBACK	.
406	PROSOPIS VELUTINA	12	17	MULTI	MEDIUM	LOW	PIP	.	.
407	ACACIA GREGGII	5	3	MULTI	MEDIUM	LOW	PIP	.	.
408	PROSOPIS VELUTINA	7	7	MULTI	LOW	LOW	NV	DIEBACK	.
409	PROSOPIS VELUTINA	11	16	MULTI	LOW	LOW	NV	DIEBACK	DAMAGED
410	PROSOPIS VELUTINA	12	19	MULTI	LOW	LOW	NV	DIEBACK	DAMAGED
411	PROSOPIS VELUTINA	7	2	MULTI	MEDIUM	LOW	PIP	.	.
412	PROSOPIS VELUTINA	10	11	MULTI	LOW	LOW	PIP	DEAD LIMB	.
413	PROSOPIS VELUTINA	13	27	MULTI	LOW	LOW	NV	DEAD LIMB	DIEBACK
414	PROSOPIS VELUTINA	9	6	MULTI	MEDIUM	LOW	PIP	.	.
415	PROSOPIS VELUTINA	13	9	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
416	PROSOPIS VELUTINA	6	5	MULTI	MEDIUM	LOW	PIP	.	.
417	PROSOPIS VELUTINA	11	9	MULTI	MEDIUM	LOW	PIP	.	.
418	PROSOPIS VELUTINA	6	3	MULTI	MEDIUM	LOW	PIP	.	.
419	PROSOPIS VELUTINA	16	30	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
420	PROSOPIS VELUTINA	8	5	MULTI	LOW	LOW	PIP	.	.
421	PROSOPIS VELUTINA	19	40	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
422	PROSOPIS VELUTINA	11	16	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
423	PROSOPIS VELUTINA	9	5	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
424	PROSOPIS VELUTINA	5	6	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
425	PROSOPIS VELUTINA	15	16	MULTI	LOW	LOW	NV	.	DIEBACK
426	PROSOPIS VELUTINA	15	16	MULTI	LOW	LOW	NV	.	DIEBACK
427	PROSOPIS VELUTINA	9	5	MULTI	LOW	LOW	NV	.	DIEBACK
428	PROSOPIS VELUTINA	11	13	MULTI	LOW	LOW	PIP	.	DEAD LIMB
429	PROSOPIS VELUTINA	8	7	MULTI	LOW	LOW	NV	.	DIEBACK
430	PROSOPIS VELUTINA	7	8	MULTI	LOW	LOW	NV	DEAD TRUNK	DIEBACK
431	PROSOPIS VELUTINA	6	5	MULTI	LOW	LOW	NV	DEAD TRUNK	.
432	PROSOPIS VELUTINA	11	15	MULTI	LOW	LOW	NV	DIEBACK	.
433	PROSOPIS VELUTINA	16	12	MULTI	LOW	LOW	NV	DIEBACK	DEAD TRUNK
434	PROSOPIS VELUTINA	8	6	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
435	PROSOPIS VELUTINA	12	16	MULTI	LOW	LOW	NV	DIEBACK	DEAD TRUNK
436	PROSOPIS VELUTINA	14	21	MULTI	LOW	LOW	NV	DIEBACK	.
437	PROSOPIS VELUTINA	7	3	MULTI	MEDIUM	LOW	PIP	.	.
438	PROSOPIS VELUTINA	7	6	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
439	PROSOPIS VELUTINA	13	9	MULTI	LOW	LOW	PIP	.	DEAD LIMB
440	PROSOPIS VELUTINA	14	10	MULTI	LOW	LOW	PIP	BROKEN LIMB	DEAD LIMB
441	PROSOPIS VELUTINA	14	8	MULTI	LOW	LOW	PIP	BROKEN LIMB	.
442	PROSOPIS VELUTINA	10	9	MULTI	LOW	LOW	NV	BROKEN LIMB	DEAD LIMB
443	PROSOPIS VELUTINA	12	8	MULTI	LOW	LOW	PIP	BROKEN LIMB	DEAD LIMB
444	PROSOPIS VELUTINA	5	3	MULTI	LOW	LOW	PIP	BROKEN LIMB	.
445	PROSOPIS VELUTINA	6	3	MULTI	LOW	LOW	PIP	DIEBACK	.
446	PROSOPIS VELUTINA	8	6	MULTI	LOW	LOW	NV	DEAD TRUNK	.
447	PROSOPIS VELUTINA	8	13	MULTI	MEDIUM	LOW	PIP	.	.
448	PROSOPIS VELUTINA	7	4	SINGLE	MEDIUM	LOW	PIP	.	.
449	ACACIA CONSTRICTA	8	3	SINGLE	MEDIUM	LOW	PIP	.	.
450	PROSOPIS VELUTINA	7	8	SINGLE	MEDIUM	LOW	PIP	.	.
451	PROSOPIS VELUTINA	11	18	MULTI	LOW	LOW	NV	BROKEN LIMB	DIEBACK
452	PROSOPIS VELUTINA	7	6	SINGLE	LOW	LOW	NV	.	DIEBACK
453	PROSOPIS VELUTINA	14	30	MULTI	LOW	LOW	NV	DEAD TRUNK	DIEBACK
454	PROSOPIS VELUTINA	11	9	MULTI	LOW	LOW	NV	DEAD LIMB	DIEBACK
455	PROSOPIS VELUTINA	18	21	MULTI	MEDIUM	LOW	PIP	.	.
456	PROSOPIS VELUTINA	12	4	MULTI	MEDIUM	LOW	PIP	.	.
457	PROSOPIS VELUTINA	13	9	MULTI	MEDIUM	LOW	PIP	.	.
458	PROSOPIS VELUTINA	14	9	MULTI	LOW	LOW	NV	DEAD LIMB	.
459	PROSOPIS VELUTINA	19	36	MULTI	MEDIUM	LOW	PIP	DAMAGED	.
460	CERCIDIUM FLORIDUM	1	36	MULTI	MEDIUM	LOW	PIP	DAMAGED	.
461	CERCIDIUM FLORIDUM	10	7	MULTI	MEDIUM	LOW	PIP	.	.
462	PROSOPIS VELUTINA	11	8	MULTI	LOW	LOW	NV	DIEBACK	.
463	CERCIDIUM MICROPHYLLUM	8	7	MULTI	MEDIUM	LOW	PIP	.	.
464	PROSOPIS VELUTINA	6	5	MULTI	LOW	LOW	NV	DEAD TRUNK	.
465	PROSOPIS VELUTINA	21	27	MULTI	MEDIUM	LOW	NV	.	.
466	CERCIDIUM FLORIDUM	19	31	MULTI	LOW	LOW	NV	DEAD LIMB	DIEBACK
467	CELTIS PALLIDA	6	0	MULTI	HIGH	LOW	PIP	.	.
468	CELTIS PALLIDA	5	0	MULTI	HIGH	LOW	PIP	.	.
469	ACACIA GREGGII	5	2	MULTI	HIGH	LOW	PIP	.	.
470	ACACIA GREGGII	5	0	MULTI	HIGH	LOW	PIP	.	.
471	PROSOPIS VELUTINA	9	12	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
472	PROSOPIS VELUTINA	10	12	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
473	PROSOPIS VELUTINA	11	9	MULTI	LOW	LOW	NV	DIEBACK	DEAD TRUNK
474	PROSOPIS VELUTINA	9	5	MULTI	LOW	LOW	NV	DIEBACK	DEAD LIMB
475	PROSOPIS VELUTINA	5	7	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
476	PROSOPIS VELUTINA	7	19	MULTI	LOW	LOW	NV	DEAD LIMB	DIEBACK
477	PROSOPIS VELUTINA	12	20	MULTI	LOW	LOW	NV	.	DIEBACK
478	PROSOPIS VELUTINA	16	26	MULTI	LOW	LOW	PIP	.	DEAD LIMB
479	ACACIA CONSTRICTA	12	6	MULTI	MEDIUM	LOW	PIP	.	.
480	ACACIA CONSTRICTA	9	4	MULTI	MEDIUM	LOW	PIP	.	.
481	ACACIA GREGGII	10	6	SINGLE	HIGH	LOW	PIP	.	.
482	ACACIA GREGGII	8	4	MULTI	HIGH	LOW	PIP	.	.
483	CELTIS PALLIDA	5	0	MULTI	HIGH	LOW	PIP	.	.
484	ACACIA GREGGII	5	0	MULTI	HIGH	LOW	PIP	.	.
485	ACACIA CONSTRICTA	9	4	MULTI	HIGH	LOW	PIP	.	.
486	CERCIDIUM MICROPHYLLUM	9	2	MULTI	HIGH	LOW	PIP	.	.
487	ACACIA CONSTRICTA	11	5	MULTI	HIGH	LOW	PIP	.	.
488	ACACIA CONSTRICTA	13	5	MULTI	HIGH	LOW	PIP	.	.
489	ACACIA CONSTRICTA	9	4	MULTI	HIGH	LOW	PIP	.	.
490	ACACIA GREGGII	9	9	SINGLE	HIGH	LOW	PIP	.	.

RIPARIAN HABITAT INVENTORY

NUMBER	SCIENTIFIC NAME	HEIGHT	CALIPER	TRUNK	VIABILITY	TRANSPLANT	DISPOSITION	NOTE1	NOTE2
491	ACACIA CONSTRICTA	6	3	MULTI	HIGH	LOW	PIP	.	.
492	ACACIA GREGGII	11	9	MULTI	HIGH	LOW	PIP	.	.
493	PROSOPIS VELUTINA	9	2	SINGLE	MEDIUM	LOW	PIP	.	.
494	ACACIA GREGGII	7	5	SINGLE	HIGH	LOW	PIP	.	.
495	CERCIDIUM MICROPHYLLUM	11	9	MULTI	MEDIUM	LOW	PIP	.	.
496	PROSOPIS VELUTINA	12	11	MULTI	MEDIUM	LOW	PIP	.	.
497	PROSOPIS VELUTINA	11	9	MULTI	MEDIUM	LOW	PIP	.	.
498	PROSOPIS VELUTINA	11	13	MULTI	LOW	LOW	PIP	.	.
499	PROSOPIS VELUTINA	12	18	MULTI	LOW	LOW	PIP	DEAD LIMB	.
500	PROSOPIS VELUTINA	111	9	SINGLE	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
501	PROSOPIS VELUTINA	13	10	SINGLE	LOW	LOW	NV	DIEBACK	DEAD TRUNK
502	CELTIS PALLIDA	8	0	MULTI	HIGH	LOW	PIP	.	.
503	ACACIA CONSTRICTA	4	2	MULTI	MEDIUM	LOW	PIP	.	.
504	PROSOPIS VELUTINA	7	4	MULTI	LOW	LOW	NV	DEAD TRUNK	DIEBACK
505	PROSOPIS VELUTINA	17	60	MULTI	LOW	LOW	NV	DEAD TRUNK	DIEBACK
506	PROSOPIS VELUTINA	8	7	MULTI	MEDIUM	LOW	PIP	.	.
507	PROSOPIS VELUTINA	7	2	MULTI	MEDIUM	LOW	PIP	.	.
508	PROSOPIS VELUTINA	8	4	MULTI	LOW	LOW	NV	DIEBACK	.
509	ZIZIPHUS OBTUSIFOLIA	6	0	MULTI	MEDIUM	LOW	PIP	.	.
510	ZIZIPHUS OBTUSIFOLIA	20	14	SINGLE	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
511	CERCIDIUM MICROPHYLLUM	12	9	MULTI	MEDIUM	LOW	PIP	.	.
512	PROSOPIS VELUTINA	18	75	MULTI	MEDIUM	LOW	PIP	.	.
513	PROSOPIS VELUTINA	16	9	SINGLE	MEDIUM	LOW	PIP	.	.
514	CELTIS PALLIDA	7	0	MULTI	MEDIUM	LOW	PIP	.	.
515	PROSOPIS VELUTINA	9	5	MULTI	MEDIUM	LOW	PIP	.	.
516	PROSOPIS VELUTINA	7	7	MULTI	LOW	LOW	NV	DIEBACK	.
517	PROSOPIS VELUTINA	8	7	MULTI	LOW	LOW	NV	DIEBACK	DAMAGED
518	PROSOPIS VELUTINA	8	4	MULTI	LOW	LOW	NV	DEAD TRUNK	DAMAGED
519	PROSOPIS VELUTINA	7	4	MULTI	LOW	LOW	NV	DEAD TRUNK	DAMAGED
520	PROSOPIS VELUTINA	10	7	MULTI	LOW	LOW	NV	DEAD TRUNK	DAMAGED
521	ACACIA CONSTRICTA	8	2	MULTI	HIGH	LOW	PIP	.	.
522	CELTIS PALLIDA	6	0	MULTI	HIGH	LOW	PIP	.	.
523	CELTIS PALLIDA	8	0	MULTI	HIGH	LOW	PIP	.	.
524	CELTIS PALLIDA	6	0	MULTI	HIGH	LOW	PIP	.	.
525	PROSOPIS VELUTINA	9	5	SINGLE	MEDIUM	LOW	PIP	.	.
526	PROSOPIS VELUTINA	11	11	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
527	PROSOPIS VELUTINA	13	8	SINGLE	MEDIUM	LOW	PIP	.	.
528	PROSOPIS VELUTINA	9	3	MULTI	MEDIUM	LOW	PIP	.	.
529	PROSOPIS VELUTINA	10	7	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
530	CELTIS PALLIDA	8	0	MULTI	MEDIUM	LOW	PIP	.	.
531	PROSOPIS VELUTINA	12	9	SINGLE	MEDIUM	LOW	PIP	.	.
532	PROSOPIS VELUTINA	13	8	MULTI	MEDIUM	LOW	PIP	.	.
533	CELTIS PALLIDA	7	0	MULTI	MEDIUM	LOW	PIP	.	.
534	PROSOPIS VELUTINA	15	19	MULTI	MEDIUM	LOW	PIP	.	.
535	CERCIDIUM MICROPHYLLUM	8	2	MULTI	HIGH	LOW	PIP	.	.
536	PROSOPIS VELUTINA	8	6	MULTI	LOW	LOW	PIP	.	.
537	CELTIS PALLIDA	7	0	MULTI	MEDIUM	LOW	PIP	.	.
538	PROSOPIS VELUTINA	12	4	MULTI	MEDIUM	LOW	PIP	.	.
539	CELTIS PALLIDA	4	0	MULTI	MEDIUM	LOW	PIP	.	.
540	PROSOPIS VELUTINA	8	4	MULTI	LOW	LOW	PIP	.	.
541	PROSOPIS VELUTINA	9	6	MULTI	MEDIUM	LOW	PIP	.	.
542	PROSOPIS VELUTINA	8	3	MULTI	HIGH	LOW	PIP	.	.
543	CELTIS PALLIDA	6	0	MULTI	HIGH	LOW	PIP	.	.
544	PROSOPIS VELUTINA	11	11	MULTI	LOW	LOW	PIP	DAMAGED	
545	PROSOPIS VELUTINA	8	12	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
546	PROSOPIS VELUTINA	8	13	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
547	PROSOPIS VELUTINA	7	5	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
548	PROSOPIS VELUTINA	10	8	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
549	PROSOPIS VELUTINA	7	7	MULTI	LOW	LOW	NV	.	.
550	PROSOPIS VELUTINA	5	4	MULTI	LOW	LOW	PIP	.	.
551	PROSOPIS VELUTINA	11	8	MULTI	LOW	LOW	PIP	BROKEN LIMB	DAMAGED
552	PROSOPIS VELUTINA	12	20	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
553	PROSOPIS VELUTINA	10	2	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
554	PROSOPIS VELUTINA	7	2	MULTI	LOW	LOW	PIP	.	.
555	PROSOPIS VELUTINA	8	3	MULTI	MEDIUM	LOW	PIP	.	.
556	PROSOPIS VELUTINA	6	2	MULTI	MEDIUM	LOW	PIP	.	.
557	PROSOPIS VELUTINA	4	2	MULTI	MEDIUM	LOW	PIP	.	.
558	CELTIS PALLIDA	11	0	MULTI	MEDIUM	LOW	PIP	.	.
559	ACACIA CONSTRICTA	8	2	MULTI	MEDIUM	LOW	PIP	.	.
560	PROSOPIS VELUTINA	6	2	MULTI	HIGH	LOW	PIP	.	.
561	ZIZIPHUS OBTUSIFOLIA	3	0	MULTI	HIGH	LOW	PIP	.	.
562	ACACIA CONSTRICTA	6	0	MULTI	HIGH	LOW	PIP	.	.
563	ACACIA GREGGII	6	0	MULTI	HIGH	LOW	PIP	.	.
564	PROSOPIS VELUTINA	7	2	SINGLE	HIGH	LOW	PIP	.	.
565	PROSOPIS VELUTINA	8	3	MULTI	HIGH	LOW	PIP	.	.
566	PROSOPIS VELUTINA	9	6	MULTI	HIGH	LOW	PIP	.	.
567	PROSOPIS VELUTINA	8	3	MULTI	HIGH	LOW	PIP	.	.
568	PROSOPIS VELUTINA	9	8	MULTI	MEDIUM	LOW	PIP	.	.
569	PROSOPIS VELUTINA	9	3	MULTI	MEDIUM	LOW	PIP	.	.
570	PROSOPIS VELUTINA	11	5	MULTI	MEDIUM	LOW	PIP	.	.
571	PROSOPIS VELUTINA	8	10	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
572	CELTIS PALLIDA	6	0	MULTI	MEDIUM	LOW	PIP	.	.
573	CELTIS PALLIDA	11	5	MULTI	MEDIUM	LOW	PIP	.	.
574	CERCIDIUM FLORIDUM	13	19	MULTI	MEDIUM	LOW	PIP	.	.
575	CERCIDIUM FLORIDUM	11	6	MULTI	MEDIUM	LOW	PIP	.	.
576	CERCIDIUM MICROPHYLLUM	9	5	MULTI	MEDIUM	LOW	PIP	.	.
577	CERCIDIUM MICROPHYLLUM	8	6	MULTI	MEDIUM	LOW	PIP	.	.
578	CERCIDIUM MICROPHYLLUM	11	12	MULTI	LOW	LOW	PIP	BROKEN LIMB	DAMAGED
579	CERCIDIUM MICROPHYLLUM	11	9	MULTI	MEDIUM	LOW	PIP	.	.
580	CELTIS PALLIDA	6	0	MULTI	MEDIUM	LOW	PIP	.	.

RIPARIAN HABITAT INVENTORY

NUMBER	SCIENTIFIC NAME	HEIGHT	CALIPER	TRUNK	VIABILITY	TRANSPLANT	DISPOSITION	NOTE1	NOTE2
581	PROSOPIS VELUTINA	9	7	MULTI	MEDIUM	LOW	PIP	.	.
582	ACACIA CONSTRICTA	5	0	MULTI	MEDIUM	LOW	PIP	.	.
583	PROSOPIS VELUTINA	8	7	MULTI	MEDIUM	LOW	PIP	.	.
584	ACACIA CONSTRICTA	7	0	MULTI	MEDIUM	LOW	PIP	.	.
585	PROSOPIS VELUTINA	11	20	MULTI	LOW	LOW	PIP	BROKEN LIMB	DAMAGED
586	PROSOPIS VELUTINA	12	12	MULTI	LOW	LOW	PIP	BROKEN LIMB	DAMAGED
587	PROSOPIS VELUTINA	9	6	MULTI	MEDIUM	LOW	PIP	.	.
588	PROSOPIS VELUTINA	7	3	MULTI	HIGH	LOW	PIP	.	.
589	CERCIDIUM FLORIDUM	10	6	MULTI	MEDIUM	LOW	PIP	.	.
590	ACACIA CONSTRICTA	5	0	MULTI	MEDIUM	LOW	PIP	.	.
591	PROSOPIS VELUTINA	17	25	MULTI	LOW	LOW	PIP	DAMAGED	.
592	PROSOPIS VELUTINA	11	8	MULTI	MEDIUM	LOW	PIP	.	.
593	PROSOPIS VELUTINA	7	4	MULTI	LOW	LOW	PIP	BROKEN LIMB	.
594	PROSOPIS VELUTINA	6	4	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
595	LYCIUM FREMONTII	5	0	MULTI	HIGH	LOW	PIP	.	.
596	ACACIA GREGGII	6	0	MULTI	HIGH	LOW	PIP	.	.
597	CERCIDIUM FLORIDUM	8	3	MULTI	HIGH	LOW	PIP	.	.
598	PROSOPIS VELUTINA	11	8	MULTI	MEDIUM	LOW	PIP	.	.
599	CERCIDIUM FLORIDUM	8	4	MULTI	MEDIUM	LOW	PIP	.	.
600	CERCIDIUM FLORIDUM	9	3	MULTI	MEDIUM	LOW	PIP	.	.
601	PROSOPIS VELUTINA	8	12	MULTI	LOW	LOW	PIP	.	.
602	ACACIA CONSTRICTA	6	0	MULTI	MEDIUM	LOW	PIP	.	.
603	ACACIA GREGGII	9	5	MULTI	LOW	LOW	NV	DEAD LIMB	DEAD TRUNK
604	ACACIA GREGGII	5	0	MULTI	MEDIUM	LOW	PIP	.	.
605	ACACIA GREGGII	6	0	MULTI	MEDIUM	LOW	PIP	.	.
606	PROSOPIS VELUTINA	11	6	MULTI	MEDIUM	LOW	PIP	.	.
607	CELTIS PALLIDA	6	0	MULTI	MEDIUM	LOW	PIP	.	.
608	ACACIA CONSTRICTA	5	0	MULTI	MEDIUM	LOW	PIP	.	.
609	PROSOPIS VELUTINA	9	4	MULTI	MEDIUM	LOW	PIP	.	.
610	PROSOPIS VELUTINA	10	6	MULTI	MEDIUM	LOW	PIP	.	.
611	ACACIA CONSTRICTA	6	0	MULTI	MEDIUM	LOW	PIP	.	.
612	ACACIA CONSTRICTA	6	0	MULTI	MEDIUM	LOW	PIP	.	.
613	ACACIA CONSTRICTA	7	0	MULTI	MEDIUM	LOW	PIP	.	.
614	CERCIDIUM FLORIDUM	7	5	MULTI	MEDIUM	LOW	PIP	.	.
615	CERCIDIUM FLORIDUM	9	6	MULTI	LOW	LOW	NV	DEAD TRUNK	.
616	PROSOPIS VELUTINA	7	2	MULTI	HIGH	LOW	PIP	.	.
617	PROSOPIS VELUTINA	8	3	MULTI	HIGH	LOW	PIP	.	.
618	CELTIS PALLIDA	3	0	MULTI	HIGH	LOW	PIP	.	.
619	ACACIA CONSTRICTA	6	0	MULTI	HIGH	LOW	PIP	.	.
620	PROSOPIS VELUTINA	8	3	MULTI	MEDIUM	LOW	PIP	.	.
621	ACACIA CONSTRICTA	5	0	MULTI	MEDIUM	LOW	PIP	.	.
622	ACACIA CONSTRICTA	8	3	MULTI	LOW	LOW	PIP	DAMAGED	.
623	PROSOPIS VELUTINA	9	20	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
624	PROSOPIS VELUTINA	12	29	MULTI	LOW	LOW	PIP	DEAD LIMB	.
625	PROSOPIS VELUTINA	5	2	MULTI	MEDIUM	LOW	PIP	.	.
626	CERCIDIUM FLORIDUM	7	9	MULTI	LOW	LOW	NV	DEAD TRUNK	.
627	CERCIDIUM MICROPHYLLUM	13	9	MULTI	LOW	MEDIUM	PIP	.	.
628	CERCIDIUM MICROPHYLLUM	16	8	MULTI	MEDIUM	MEDIUM	PIP	.	.
629	PROSOPIS VELUTINA	6	4	MULTI	MEDIUM	MEDIUM	PIP	.	.
630	PROSOPIS VELUTINA	19	35	MULTI	LOW	LOW	PIP	.	.
631	CERCIDIUM MICROPHYLLUM	6	7	MULTI	LOW	LOW	PIP	.	.
632	PROSOPIS VELUTINA	10	6	MULTI	LOW	LOW	NV	DEAD TRUNK	.
633	PROSOPIS VELUTINA	15	8	MULTI	LOW	LOW	NV	DIEBACK	DEAD LIMB
634	PROSOPIS VELUTINA	8	7	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
635	CERCIDIUM FLORIDUM	5	3	MULTI	MEDIUM	LOW	PIP	.	.
636	ACACIA CONSTRICTA	5	0	MULTI	MEDIUM	LOW	PIP	.	.
637	PROSOPIS VELUTINA	7	4	MULTI	MEDIUM	LOW	PIP	.	.
638	PROSOPIS VELUTINA	11	6	MULTI	LOW	LOW	PIP	BROKEN LIMB	.
639	PROSOPIS VELUTINA	10	11	MULTI	LOW	LOW	NV	DIEBACK	DEAD LIMB
640	ACACIA CONSTRICTA	5	0	MULTI	LOW	LOW	NV	DIEBACK	DEAD LIMB
641	CERCIDIUM FLORIDUM	9	9	MULTI	LOW	LOW	PIP	.	.
642	ACACIA CONSTRICTA	8	0	MULTI	LOW	LOW	PIP	.	.
643	ACACIA GREGGII	6	0	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
644	ACACIA GREGGII	5	0	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
645	CELTIS PALLIDA	6	0	MULTI	LOW	LOW	PIP	.	.
646	ACACIA CONSTRICTA	7	0	MULTI	LOW	LOW	PIP	.	.
647	ACACIA CONSTRICTA	8	0	MULTI	LOW	LOW	PIP	.	.
648	ACACIA CONSTRICTA	7	0	MULTI	LOW	LOW	PIP	.	.
649	ACACIA CONSTRICTA	8	0	MULTI	LOW	LOW	PIP	.	.
650	ACACIA CONSTRICTA	8	3	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
651	CELTIS PALLIDA	7	0	MULTI	LOW	LOW	PIP	.	.
652	PROSOPIS VELUTINA	19	39	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
653	CELTIS PALLIDA	10	0	MULTI	LOW	LOW	PIP	.	.
654	PROSOPIS VELUTINA	4	4	MULTI	LOW	LOW	PIP	.	.
655	PROSOPIS VELUTINA	7	2	MULTI	LOW	LOW	PIP	.	.
656	PROSOPIS VELUTINA	8	6	MULTI	LOW	LOW	PIP	.	.
657	PROSOPIS VELUTINA	9	13	MULTI	LOW	LOW	NV	DEAD TRUNK	.
658	ACACIA GREGGII	5	0	MULTI	LOW	LOW	NV	DEAD TRUNK	.
659	ACACIA CONSTRICTA	7	0	MULTI	LOW	LOW	PIP	.	.
660	ACACIA CONSTRICTA	12	20	MULTI	LOW	LOW	NV	BROKEN LIMB	DIEBACK
661	PROSOPIS VELUTINA	9	5	MULTI	MEDIUM	LOW	PIP	.	.
662	PROSOPIS VELUTINA	10	8	MULTI	LOW	LOW	PIP	BROKEN LIMB	.
663	ACACIA CONSTRICTA	8	0	MULTI	HIGH	LOW	PIP	.	.
664	ACACIA GREGGII	9	0	MULTI	HIGH	LOW	PIP	.	.
665	ACACIA CONSTRICTA	10	0	MULTI	HIGH	LOW	PIP	.	.
666	ZIZIPHUS OBTUSIFOLIA	8	0	MULTI	HIGH	LOW	PIP	.	.
667	LYCIUM FREMONTII	8	0	MULTI	HIGH	LOW	PIP	.	.
668	CERCIDIUM FLORIDUM	6	3	MULTI	HIGH	LOW	PIP	.	.
669	CERCIDIUM FLORIDUM	7	6	MULTI	HIGH	LOW	PIP	.	.
670	CERCIDIUM FLORIDUM	10	6	MULTI	MEDIUM	LOW	PIP	.	.
671	CELTIS PALLIDA	12	0	MULTI	HIGH	LOW	PIP	.	.
672	PROSOPIS VELUTINA	12	20	MULTI	HIGH	LOW	PIP	.	.
673	PROSOPIS VELUTINA	19	40	MULTI	MEDIUM	LOW	PIP	.	OLD
674	CERCIDIUM FLORIDUM	12	12	MULTI	MEDIUM	LOW	PIP	.	.
675	PROSOPIS VELUTINA	20	40	MULTI	LOW	LOW	PIP	.	OLD

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2 e congress ste 600 tucson az 85701 520.623.6146 520.622.1950 azplanningcenter.com

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#	REVISIONS/SUBMITTALS	DATE
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INVENTORY LIST

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PRELIMINARY NOT FOR CONSTRUCTION OR RECORDING
EXPIRES 06/30/20

LA VILLITA
RIPARIAN HABITAT
CONSERVATION PLAN
SA12-19-00007

CASE NO: SA12-1900007
REFERENCE:
RH-7
7 OF 10

RIPARIAN HABITAT INVENTORY

NUMBER	SCIENTIFIC NAME	HEIGHT	CALIPER	TRUNK	VIABILITY	TRANSPLANT	DISPOSITION	NOTE1	NOTE2
678	PROSOPIS VELUTINA	17	26	MULTI	LOW	LOW	NV	DEAD TRUNK	DIEBACK
679	ACACIA CONSTRICTA	15	3	MULTI	MEDIUM	LOW	PIP	.	.
680	PROSOPIS VELUTINA	17	12	MULTI	MEDIUM	LOW	PIP	.	.
681	PROSOPIS VELUTINA	18	4	MULTI	MEDIUM	LOW	PIP	.	.
682	PROSOPIS VELUTINA	14	46	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
683	PROSOPIS VELUTINA	9	5	MULTI	LOW	LOW	PIP	BROKEN LIMB	DAMAGED
684	PROSOPIS VELUTINA	6	18	MULTI	LOW	LOW	NV	DEAD TRUNK	DEAD LIMB
685	PROSOPIS VELUTINA	10	7	MULTI	LOW	LOW	PIP	.	.
686	PROSOPIS VELUTINA	9	6	MULTI	LOW	LOW	PIP	.	.
687	PROSOPIS VELUTINA	9	7	MULTI	LOW	LOW	PIP	.	.
688	PROSOPIS VELUTINA	14	29	MULTI	LOW	LOW	NV	DEAD TRUNK	DIEBACK
689	PROSOPIS VELUTINA	12	5	MULTI	LOW	LOW	PIP	.	.
690	PROSOPIS VELUTINA	19	20	MULTI	LOW	LOW	PIP	.	.
691	PROSOPIS VELUTINA	9	4	MULTI	MEDIUM	LOW	PIP	.	.
692	PROSOPIS VELUTINA	10	5	MULTI	MEDIUM	LOW	PIP	.	.
693	PROSOPIS VELUTINA	15	14	MULTI	MEDIUM	LOW	PIP	.	.
694	PROSOPIS VELUTINA	10	4	MULTI	MEDIUM	LOW	PIP	.	.
695	CERCIDIUM FLORIDUM	9	3	MULTI	LOW	LOW	NV	.	BROOM
696	PROSOPIS VELUTINA	16	25	MULTI	LOW	LOW	NV	DEAD TRUNK	.
697	CERCIDIUM FLORIDUM	20	40	MULTI	LOW	LOW	NV	DEAD LIMB	DIEBACK/BROOM
698	PROSOPIS VELUTINA	2	40	MULTI	LOW	LOW	NV	DEAD LIMB	DIEBACK/BROOM
699	PROSOPIS VELUTINA	16	15	MULTI	LOW	LOW	NV	DEAD LIMB	DIEBACK
700	PROSOPIS VELUTINA	10	29	MULTI	LOW	LOW	NV	DEAD LIMB	DIEBACK
701	CERCIDIUM FLORIDUM	13	9	MULTI	LOW	LOW	PIP	DAMAGED	.
702	PROSOPIS VELUTINA	6	3	MULTI	LOW	LOW	PIP	WIDE BASE	.
703	CELTIS PALLIDA	8	0	MULTI	MEDIUM	LOW	PIP	.	.
704	PROSOPIS VELUTINA	16	15	MULTI	MEDIUM	LOW	PIP	.	.
705	CELTIS PALLIDA	5	0	MULTI	MEDIUM	LOW	PIP	.	.
706	PROSOPIS VELUTINA	17	15	SINGLE	MEDIUM	LOW	PIP	.	.
707	PROSOPIS VELUTINA	12	5	SINGLE	MEDIUM	LOW	PIP	.	.
708	PROSOPIS VELUTINA	9	2	SINGLE	MEDIUM	LOW	PIP	.	.
709	PROSOPIS VELUTINA	19	28	MULTI	MEDIUM	LOW	PIP	.	OLD
710	PROSOPIS VELUTINA	10	18	MULTI	TBD	TBD	TBD	VIA AERIAL	
711	PROSOPIS VELUTINA	10	18	MULTI	TBD	TBD	TBD	VIA AERIAL	
712	PROSOPIS VELUTINA	10	18	MULTI	TBD	TBD	TBD	VIA AERIAL	
713	PROSOPIS VELUTINA	10	18	MULTI	TBD	TBD	TBD	VIA AERIAL	
714	PROSOPIS VELUTINA	10	18	MULTI	TBD	TBD	TBD	VIA AERIAL	
715	PROSOPIS VELUTINA	10	18	MULTI	TBD	TBD	TBD	VIA AERIAL	
716	PROSOPIS VELUTINA	10	18	MULTI	TBD	TBD	TBD	VIA AERIAL	
717	PROSOPIS VELUTINA	10	18	MULTI	TBD	TBD	TBD	VIA AERIAL	

INVENTORY SUMMARY NOTES:

1. PLANTS SHOWN ON SHEET RH-5 WERE INVENTORIED VIA AIR PHOTO. SPECIES, SIZE, CALIPER, VIABILITY AND TRANSPLANTABILITY ARE TO BE DETERMINED.
2. THE NUMBER OF PLANTS SHOWN ON SHEET RH-5 MAY INCREASE OR DECREASE WHEN INVENTORIED.
3. ALL PLANTS FOUND IN THIS AREA SHALL BE INVENTORIED IN A MANNER CONSISTENT WITH THOSE INVENTORIED ON THE REST OF THE SITE.

RIPARIAN HABITAT INVENTORY ELIGIBLE FOR TRANSPLANT

NUMBER	SCIENTIFIC NAME	HEIGHT	CALIPER	TRUNK	VIABILITY	TRANSPLANT	DISPOSITION	NOTE1	NOTE2
130	YUCCA ELATA	8	0	SINGLE	HIGH	LOW	PIP	.	.
230	CELTIS PALLIDA	7	0	MULTI	HIGH	LOW	PIP	.	.
244	CELTIS PALLIDA	8	0	MULTI	HIGH	LOW	PIP	.	.
467	CELTIS PALLIDA	6	0	MULTI	HIGH	LOW	PIP	.	.
468	CELTIS PALLIDA	5	0	MULTI	HIGH	LOW	PIP	.	.
470	ACACIA GREGGII	5	0	MULTI	HIGH	LOW	PIP	.	.
483	CELTIS PALLIDA	5	0	MULTI	HIGH	LOW	PIP	.	.
484	ACACIA GREGGII	5	0	MULTI	HIGH	LOW	PIP	.	.
502	CELTIS PALLIDA	8	0	MULTI	HIGH	LOW	PIP	.	.
522	CELTIS PALLIDA	6	0	MULTI	HIGH	LOW	PIP	.	.
523	CELTIS PALLIDA	8	0	MULTI	HIGH	LOW	PIP	.	.
524	CELTIS PALLIDA	6	0	MULTI	HIGH	LOW	PIP	.	.
543	CELTIS PALLIDA	6	0	MULTI	HIGH	LOW	PIP	.	.
561	ZIZIPHUS OBTUSIFOLIA	3	0	MULTI	HIGH	LOW	PIP	.	.
562	ACACIA CONSTRICTA	6	0	MULTI	HIGH	LOW	PIP	.	.
563	ACACIA GREGGII	6	0	MULTI	HIGH	LOW	PIP	.	.
595	LYCIUM FREMONTII	5	0	MULTI	HIGH	LOW	PIP	.	.
596	ACACIA GREGGII	6	0	MULTI	HIGH	LOW	PIP	.	.
618	CELTIS PALLIDA	3	0	MULTI	HIGH	LOW	PIP	.	.
619	ACACIA CONSTRICTA	6	0	MULTI	HIGH	LOW	PIP	.	.
663	ACACIA CONSTRICTA	6	0	MULTI	HIGH	LOW	PIP	.	.
664	ACACIA GREGGII	9	0	MULTI	HIGH	LOW	PIP	.	.
665	ACACIA CONSTRICTA	10	0	MULTI	HIGH	LOW	PIP	.	.
666	ZIZIPHUS OBTUSIFOLIA	8	0	MULTI	HIGH	LOW	PIP	.	.
667	LYCIUM FREMONTII	6	0	MULTI	HIGH	LOW	PIP	.	.
671	CELTIS PALLIDA	12	0	MULTI	HIGH	LOW	PIP	.	.
248	PROSOPIS VELUTINA	8	2	SINGLE	HIGH	LOW	PIP	.	.
249	CERCIDIUM FLORIDUM	8	2	MULTI	HIGH	LOW	PIP	.	.
260	ACACIA CONSTRICTA	6	2	MULTI	HIGH	LOW	PIP	.	.
266	ACACIA CONSTRICTA	7	2	MULTI	HIGH	LOW	PIP	.	.
267	ACACIA CONSTRICTA	6	2	MULTI	HIGH	LOW	PIP	.	.
278	PROSOPIS VELUTINA	7	2	MULTI	HIGH	LOW	PIP	.	.
345	PROSOPIS VELUTINA	7	2	SINGLE	HIGH	LOW	PIP	.	.
469	ACACIA GREGGII	5	2	MULTI	HIGH	LOW	PIP	.	.
486	CERCIDIUM MICROPHYLLUM	9	2	MULTI	HIGH	LOW	PIP	.	.
521	ACACIA CONSTRICTA	8	2	MULTI	HIGH	LOW	PIP	.	.
535	CERCIDIUM MICROPHYLLUM	8	2	MULTI	HIGH	LOW	PIP	.	.
560	PROSOPIS VELUTINA	6	2	MULTI	HIGH	LOW	PIP	.	.
564	PROSOPIS VELUTINA	7	2	SINGLE	HIGH	LOW	PIP	.	.
616	PROSOPIS VELUTINA	7	2	MULTI	HIGH	LOW	PIP	.	.
111	PROSOPIS VELUTINA	11	3	SINGLE	HIGH	LOW	PIP	.	.
250	PROSOPIS VELUTINA	9	3	MULTI	HIGH	LOW	PIP	.	.
491	ACACIA CONSTRICTA	6	3	MULTI	HIGH	LOW	PIP	.	.
542	PROSOPIS VELUTINA	6	3	MULTI	HIGH	LOW	PIP	.	.
565	PROSOPIS VELUTINA	8	3	MULTI	HIGH	LOW	PIP	.	.
567	PROSOPIS VELUTINA	8	3	MULTI	HIGH	LOW	PIP	.	.
588	PROSOPIS VELUTINA	7	3	MULTI	HIGH	LOW	PIP	.	.
597	CERCIDIUM FLORIDUM	8	3	MULTI	HIGH	LOW	PIP	.	.
617	PROSOPIS VELUTINA	6	3	MULTI	HIGH	LOW	PIP	.	.
668	CERCIDIUM FLORIDUM	6	3	MULTI	HIGH	LOW	PIP	.	.
102	PROSOPIS VELUTINA	13	4	MULTI	HIGH	LOW	PIP	.	.
115	PROSOPIS VELUTINA	12	4	SINGLE	HIGH	LOW	PIP	.	.
121	PROSOPIS VELUTINA	13	4	SINGLE	HIGH	LOW	PIP	.	.
122	PROSOPIS VELUTINA	10	4	MULTI	HIGH	LOW	PIP	.	.
226	PROSOPIS VELUTINA	10	4	MULTI	HIGH	LOW	PIP	.	.
384	PROSOPIS VELUTINA	6	4	MULTI	HIGH	LOW	PIP	.	.
482	ACACIA GREGGII	8	4	MULTI	HIGH	LOW	PIP	.	.
485	ACACIA CONSTRICTA	9	4	MULTI	HIGH	LOW	PIP	.	.
489	ACACIA CONSTRICTA	9	4	MULTI	HIGH	LOW	PIP	.	.
114	PROSOPIS VELUTINA	11	5	SINGLE	HIGH	LOW	PIP	.	.
217	ACACIA CONSTRICTA	12	5	MULTI	HIGH	LOW	PIP	.	.
220	ACACIA CONSTRICTA	7	5	MULTI	HIGH	LOW	PIP	.	.
487	ACACIA CONSTRICTA	11	5	MULTI	HIGH	LOW	PIP	.	.
488	ACACIA CONSTRICTA	13	5	MULTI	HIGH	LOW	PIP	.	.
494	ACACIA GREGGII	7	5	SINGLE	HIGH	LOW	PIP	.	.
104	PROSOPIS VELUTINA	12	6	MULTI	HIGH	LOW	PIP	.	.
109	PROSOPIS VELUTINA	11	6	SINGLE	HIGH	LOW	PIP	.	.
112	PROSOPIS VELUTINA	11	6	MULTI	HIGH	LOW	PIP	.	.
128	CELTIS PALLIDA	10	6	MULTI	HIGH	LOW	PIP	.	.
135	CELTIS PALLIDA	10	6	MULTI	HIGH	LOW	PIP	.	.
481	ACACIA GREGGII	10	6	SINGLE	HIGH	LOW	PIP	.	.
566	PROSOPIS VELUTINA	9	6	MULTI	HIGH	LOW	PIP	.	.
669	CERCIDIUM FLORIDUM	7	6	MULTI	HIGH	LOW	PIP	.	.
108	PROSOPIS VELUTINA	10	8	MULTI	HIGH	LOW	PIP	.	.
218	ACACIA CONSTRICTA	13	8	MULTI	HIGH	LOW	PIP	.	.
134	PROSOPIS VELUTINA	11	9	MULTI	HIGH	LOW	PIP	.	.
139	PROSOPIS VELUTINA	13	9	SINGLE	HIGH	LOW	PIP	.	.
490	ACACIA GREGGII	9	9	SINGLE	HIGH	LOW	PIP	.	.
492	ACACIA GREGGII	11	9	MULTI	HIGH	LOW	PIP	.	.

PIP DISPOSITION SHOWN HERE IS FROM THE INVENTORY. NOT KNOWING THE FINAL DISPOSITION OF PLANTS DURING THE INVENTROY, ALL PLANTS WERE DESIGNATED EITHER PIP OR NV. THESE PLANTS MEET THE CRITERIA FOR TRANSPLANTING AND MAY BE TRANSPLANTED DURING THE DEVELOPMENT PROCESS.

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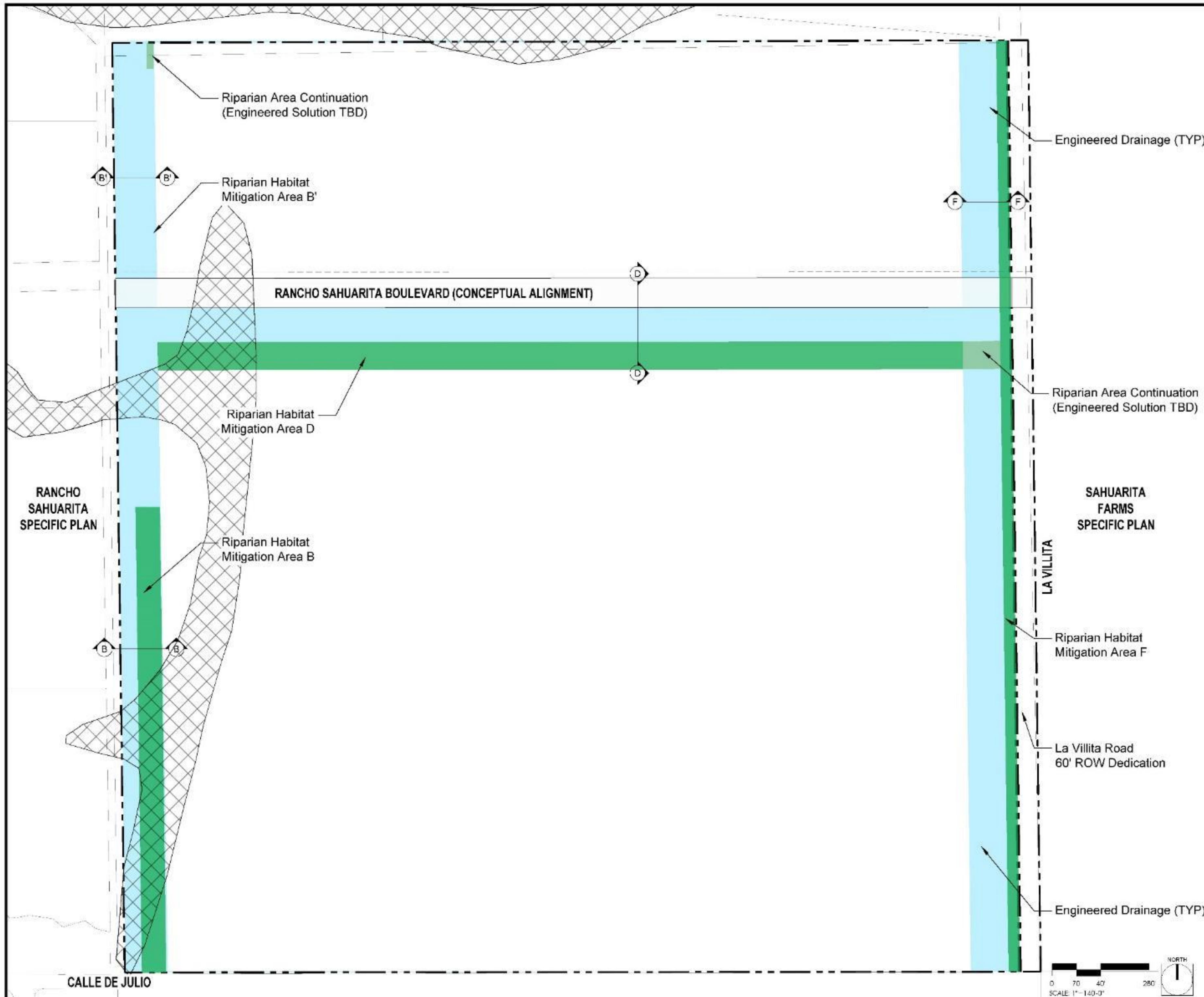
LA VILLITA
RIPARIAN HABITAT CONSERVATION PLAN
SA12-19-00007

CASE NO: SA12-1900007
REFERENCE: -
RH-8
8 OF 10



SITE SUMMARY:

EXISTING XERORIPARIAN 'C' ON-SITE: 8.7 AC
POTENTIAL XERORIPARIAN 'C' DISTURBANCE; 8.7 AC

AREA CALCULATIONS FOR RECREATED RIPARIAN AREAS:
RECREATED RIPARIAN AREA B: 2.15 AC
RECREATED RIPARIAN AREA B': .6 AC
RECREATED RIPARIAN AREA D: 4.2
RECREATED RIPARIAN AREA F: 1.9
TOTAL RECREATED RIPARIAN AREA PROVIDED: 8.85 AC

NOTES:

1. THIS CONSERVATION PLAN IS BASED ON A CONCEPTUAL SITE PLAN AND SUBJECT TO CHANGE.
2. RIPARIAN AREAS MAY BE CLEANED AND MAINTAINED WHEN ADJACENT TO RESIDENTIAL PROPERTIES, ENGINEERED HYDROLOGY CONVEYANCE SYSTEMS, ROADS AND INFRASTRUCTURE.
3. WHERE POSSIBLE, A PEDESTRIAN PATH MAY BE PROVIDED IN THE RIPARIAN AREA. THE WIDTH AND SURFACE OF THE PATH IS TO BE DETERMINED.
4. WHERE POSSIBLE, WATER HARVESTING BASINS SHALL BE INCORPORATED IN THE RIPARIAN AREA. BASINS SHOULD BE A MINIMUM OF 6 INCHES DEEP AND HAVE A MAXIMUM DEPTH OF 18 INCHES.
5. RIPARIAN AREAS SHALL BE HYDROSEEDED WITH A MIX OF ANNUAL WILDFLOWERS AND GRASSES, PERENNIALS AND SHRUBS. NO TREES SHALL BE INCLUDED IN THE HYDROSEED MIX. (SEE MIX BELOW)
6. THE TREES AND SHRUBS LISTED IN THE TABLE TITLED "RIPARIAN HABITAT INVENTORY ELIGIBLE FOR TRANSPLANT" ON SHEET RH-7 MAY BE TRANSPLANTED ON SITE IF LONG TERM SURVIVABILITY IS EXPECTED. TRANSPLANTED SPECIMEN THAT DO NOT SURVIVE TRANSPLANTING SHALL BE REPLACED IN LIKE KIND. REPLACED TREES SHALL BE 15 GALLONS IN SIZE AND SHRUBS SHALL BE 5 GALLONS IN SIZE.
7. AN INDIVIDUAL PLANT INVENTORY WAS PREPARED FOR THIS CONSERVATION PLAN. THIS CONSERVATION PLAN WILL MITIGATE FOR TREES AND SHRUBS DETERMINED VIABLE DURING THE INVENTORY. A MINIMUM OF 62 SHRUBS AND 364 TREES SHALL BE PLANTED IN THE RECREATED RIPARIAN AREAS.
8. SEE SHEET RH-9 SECTIONS FOR WIDTHS AND FURTHER DETAILS ABOUT THE RECREATED RIPARIAN AREAS

HYDROSEED MIX

BOTANICAL NAME	COMMON NAME	LBS. PLS/AC
Aristida purpurea	Purple Three-awn	2.0
Baileya multiradiata	Desert Marigold	2.0
Celtis pallida	Desert Hackberry	1.0
Eschscholzia californica	Mexican Gold Poppy	1.0
Muhlenbergia rigens	Deergrass	1.0
Penstemon pseudospectabilis	Desert Penstemon	2.0
Plantago insularis	Indian Wheat	3.0
Sphaeralcea ambigua	Desert Globe Mallow	1.0
Sporobolus cryptandrus	Sand Dropseed	1.0
Verbesina encelioides	Butter daisy	1.0

Legend

- Existing Xeroriparian 'C'
- Riparian Habitat Mitigation Area
- Engineered Drainage
- Riparian Area Continuation (Engineered Solution TBD)

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LA VILLITA
RIPARIAN HABITAT
CONSERVATION PLAN
SA12-19-00007

CASE NO: SA12-1900007
REFERENCE:
MIT PLAN
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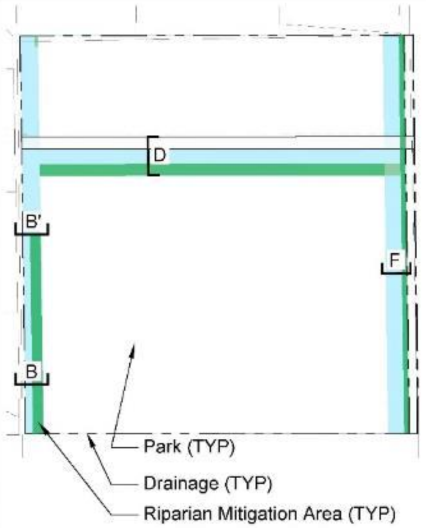
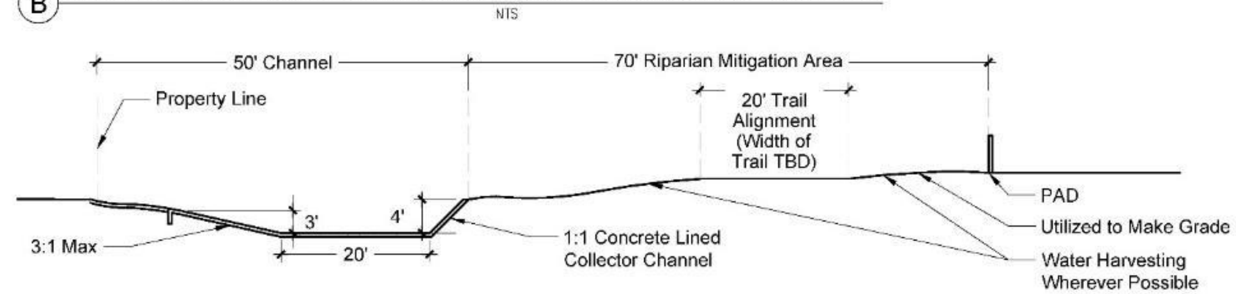


(B) SECTION B: CONCRETE LINED CHANNEL AND RIPARIAN MITIGATION AREA

NTS

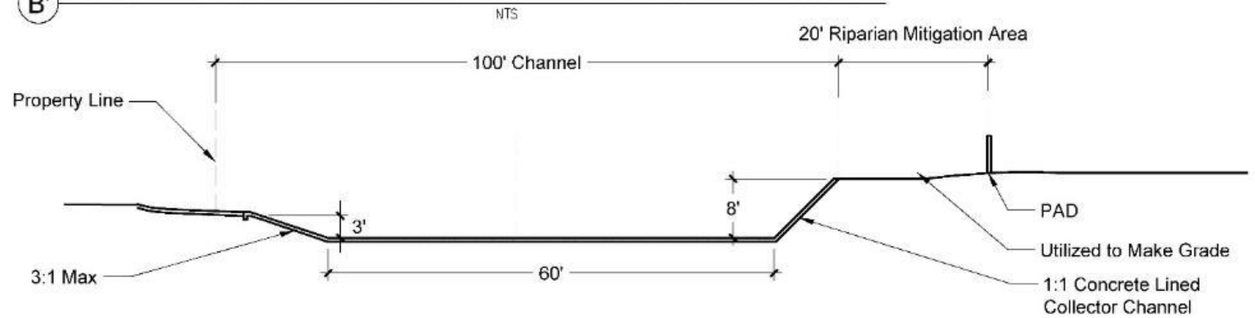


Section Notes:

1. These sections are schematic and for riparian/planning purposes only. Sections have been created with the help of Rick Engineering.
2. This concept creates 2.15 AC of Riparian Habitat Mitigation area.
3. No additional space is needed within this concepts existing drainage space.
4. Trail will not be the full width of the trail alignment. Trail surface and width TBD.
5. Utilize trail alignment for recreation requirements and riparian requirements. Trail alignment may accommodate canopy trees, site furnishings, and recreational amenities, in addition to riparian mitigation plant material.

(B') SECTION B': CONCRETE LINED CHANNEL AND RIPARIAN MITIGATION AREA

NTS

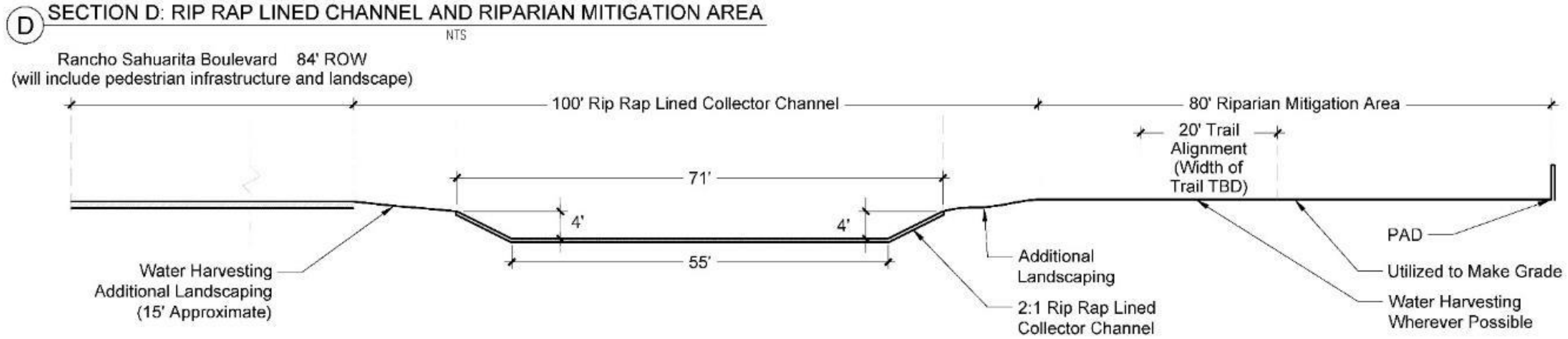


Section Notes:

1. These sections are schematic and for riparian/planning purposes only. Sections have been created with the help of Rick Engineering.
2. This concept creates 0.6 AC of Riparian Habitat Mitigation area.
3. No additional space is needed within this concepts existing drainage space.
4. No trail provided within this section.

(D) SECTION D: RIP RAP LINED CHANNEL AND RIPARIAN MITIGATION AREA

NTS

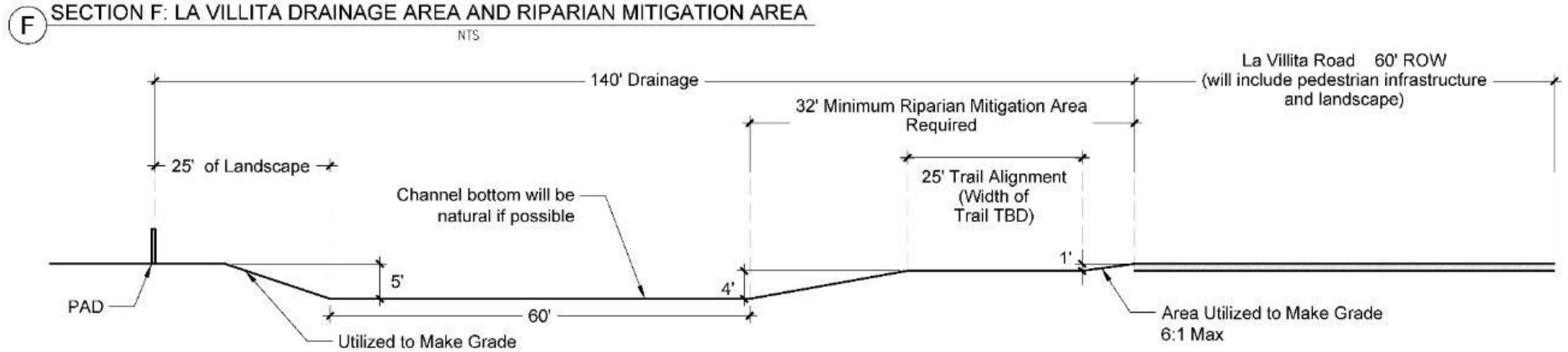


Section Notes:

1. These sections are schematic and for riparian/planning purposes only. Sections have been created with the help of Rick Engineering.
2. This Concept creates 4.2 AC of Riparian Habitat Mitigation area.
3. 80 additional feet of space is needed adjacent to this concepts existing drainage space.
4. Trail area may be placed on either side of channel.
5. Trail will not be the full width of the trail alignment. Trail surface and width TBD.
6. Utilize trail alignment for recreation requirements and riparian requirements. Trail alignment may accommodate canopy trees, site furnishings, and recreational amenities, in addition to riparian mitigation plant material.

(F) SECTION F: LA VILLITA DRAINAGE AREA AND RIPARIAN MITIGATION AREA

NTS



Section Notes:

1. These sections are schematic and for riparian/planning purposes only. Sections have been created with the help of Rick Engineering.
2. A minimum of 32' of Riparian Area is required to meet the minimum mitigation area Requirement of 1.9 AC.
3. No lined channels if possible.
5. Trail will not be the full width of the trail alignment. Trail surface and width TBD.
6. Utilize trail alignment for recreation requirements and riparian requirements. Trail alignment may accommodate canopy trees, site furnishings, and recreational amenities, in addition to riparian mitigation plant material.

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SA12-19-00007

CASE NO: SA12-1900007
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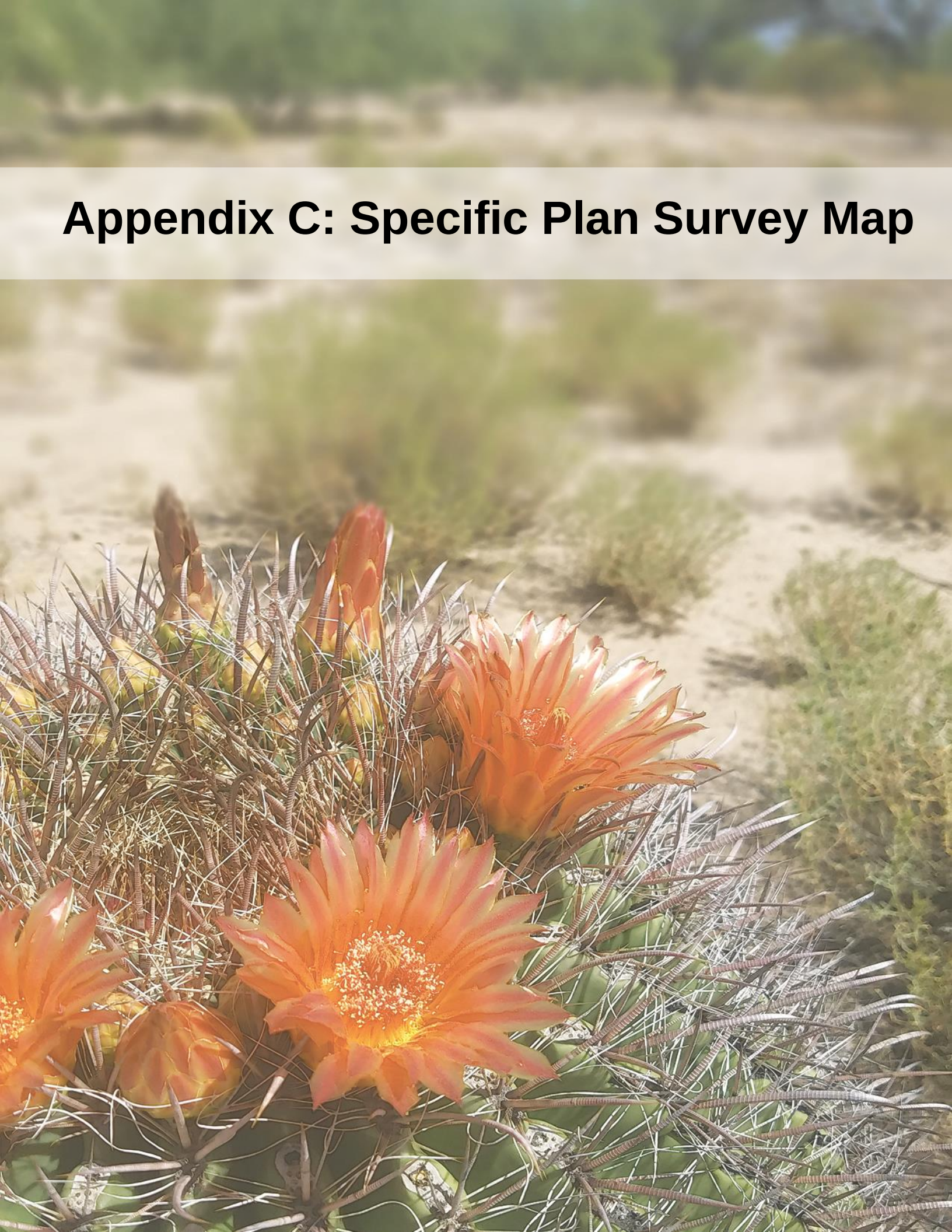
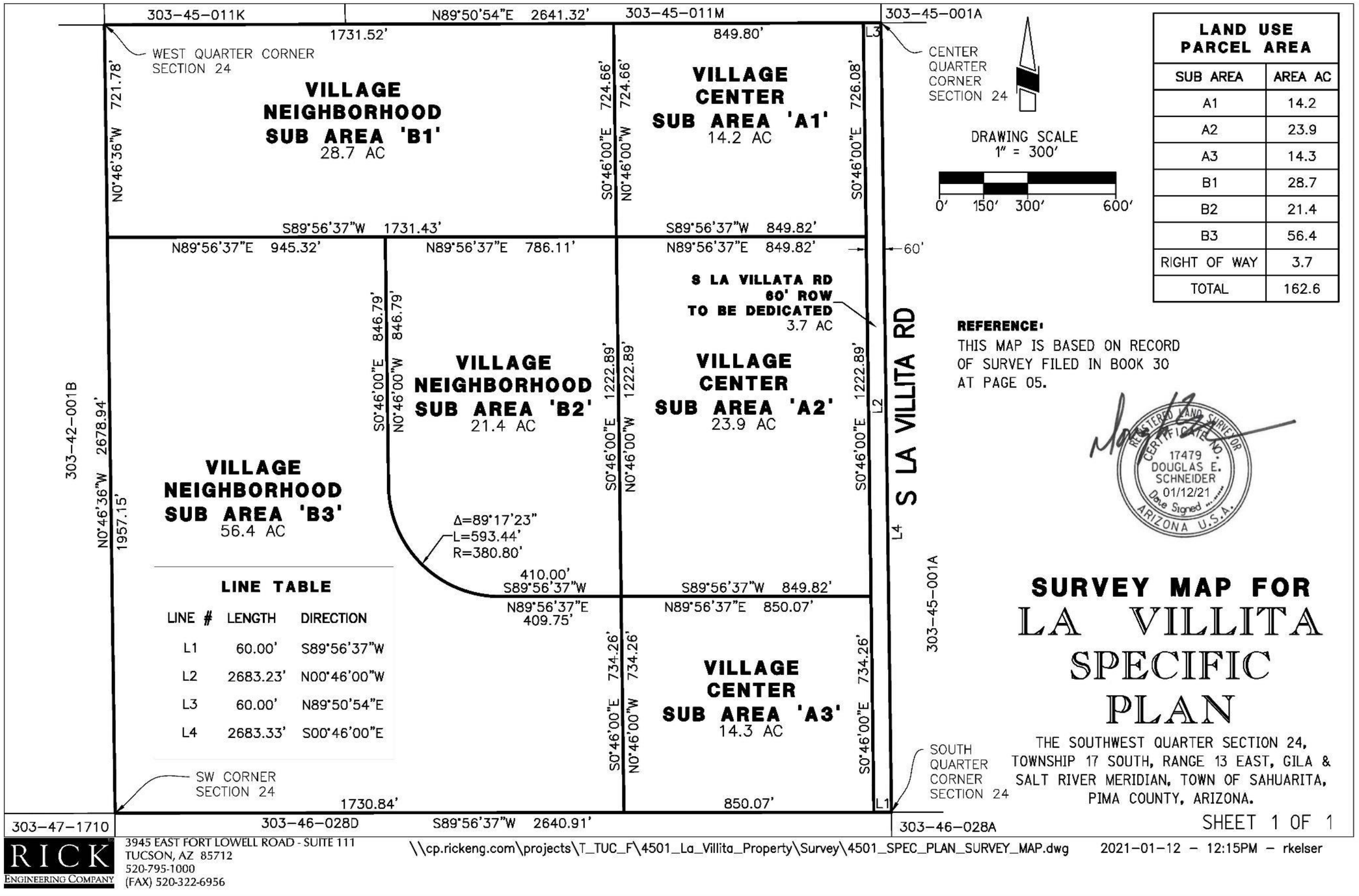
10 OF 10

Appendix C: Specific Plan Survey Map





LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	60.00'	S89°56'37"W
L2	2683.23'	N00°46'00"W
L3	60.00'	N89°50'54"E
L4	2683.33'	S00°46'00"E

LAND USE PARCEL AREA	
SUB AREA	AREA AC
A1	14.2
A2	23.9
A3	14.3
B1	28.7
B2	21.4
B3	56.4
RIGHT OF WAY	3.7
TOTAL	162.6

REFERENCE:
THIS MAP IS BASED ON RECORD OF SURVEY FILED IN BOOK 30 AT PAGE 05.

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
17479
DOUGLAS E. SCHNEIDER
01/12/21
Date Signed
ARIZONA U.S.A.

SURVEY MAP FOR
LA VILLITA SPECIFIC PLAN

THE SOUTHWEST QUARTER SECTION 24, TOWNSHIP 17 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN, TOWN OF SAHUARITA, PIMA COUNTY, ARIZONA.

SHEET 1 OF 1

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TUCSON, AZ 85712
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\\cp.rickeng.com\projects\T_TUC_F\4501_La_Villita_Property\Survey\4501_SPEC_PLAN_SURVEY_MAP.dwg 2021-01-12 - 12:15PM - rkelser