

LANDSCAPED BUFFER  
 PA-1  
 12,500 SF LOTS  
 PA-2  
 10,000 SF LOTS

ENHANCED VEGETATION  
 DRAINAGE TRACT  
 100 YEAR FLOODPLAIN LIMIT

HORSESHOE /  
 BOCCO COURT

PRIMARY ENTRY  
 EHS LIMIT

WASH ENHANCEMENT AREA  
 ENHANCED VEGETATION

PRIVATE STREET W/  
 WALK ON EAST SIDE

THE OVERLOOK  
 W/ RAMADA

DG TRAIL CONNECTION  
 (AT-GRADE)

MILLER RANCH   PROJECT SUMMARY	
SITE AREA:	16.3 AC
TOTAL LOTS:	30
DENSITY:	1.84 RAC
TOTAL OPEN SPACE:	6.4 AC (39%)
ESL CRA (WASH):	3.4 AC (95%)
ESL RMA:	1.6 AC
WASH RESTORATION CREDIT:	1.5 AC

Note: Graphic is for illustrative Purpose Only.

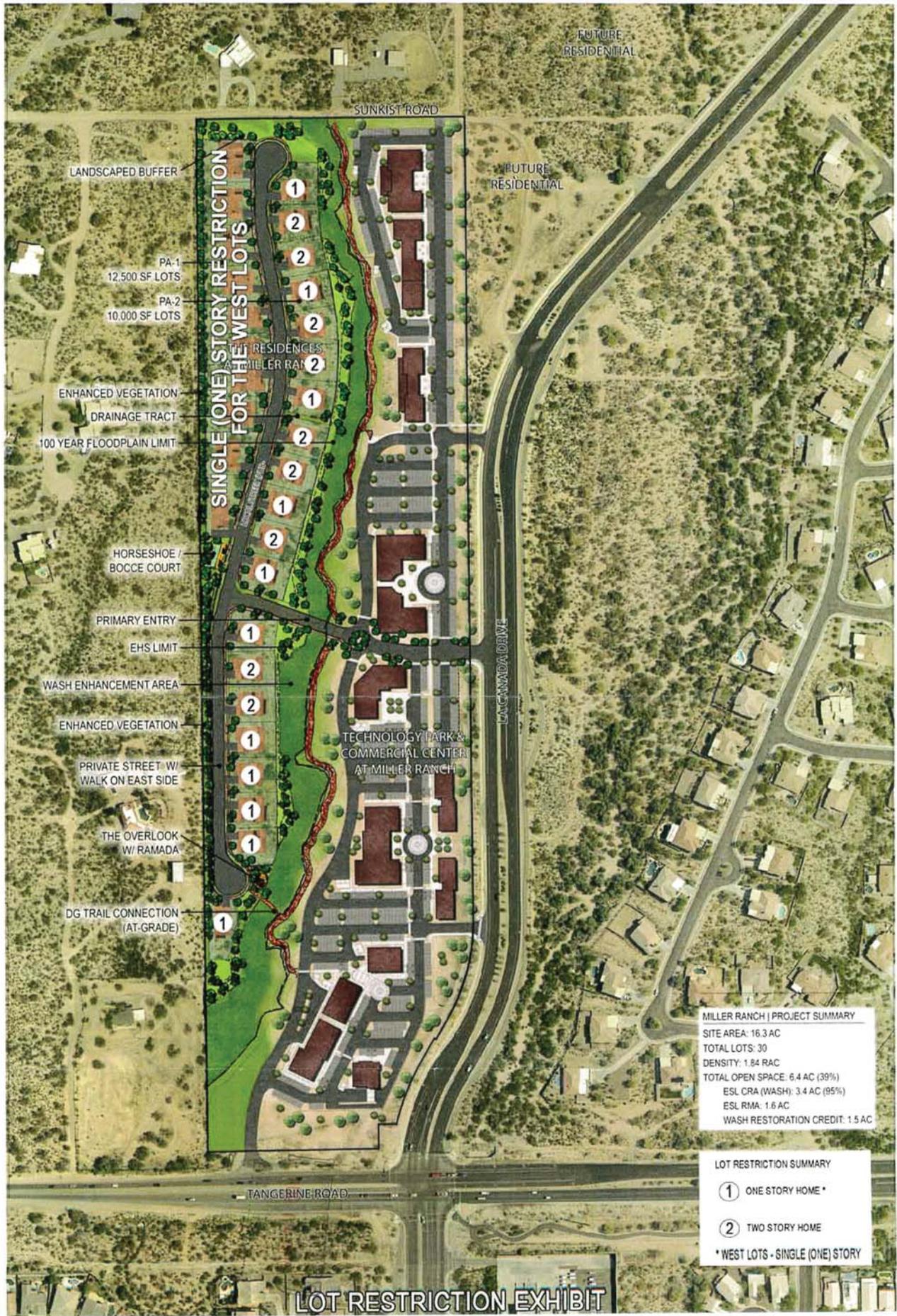


**MILLER RANCH**  
 Concept Plan  
 June 1, 2015

DESCO Southwest

RICK

NORRIS DESIGN  
 Planning | Landscape Architecture



LANDSCAPED BUFFER  
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 PA-2  
 10,000 SF LOTS

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THE OVERLOOK  
 W/ RAMADA

DG TRAIL CONNECTION  
 (AT-GRADE)

SINGLE (ONE) STORY RESTRICTION FOR THE WEST LOTS

RESIDENCES  
 AT MILLER RANCH

TECHNOLOGY PARK &  
 COMMERCIAL CENTER  
 AT MILLER RANCH

FUTURE  
 RESIDENTIAL

FUTURE  
 RESIDENTIAL

**MILLER RANCH | PROJECT SUMMARY**  
 SITE AREA: 16.3 AC  
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 TOTAL OPEN SPACE: 6.4 AC (39%)  
 ESL CRA (WASH): 3.4 AC (95%)  
 ESL RMA: 1.6 AC  
 WASH RESTORATION CREDIT: 1.5 AC

**LOT RESTRICTION SUMMARY**

- ① ONE STORY HOME \*
- ② TWO STORY HOME

\* WEST LOTS - SINGLE (ONE) STORY

**LOT RESTRICTION EXHIBIT**

Note: Graphic is for illustrative Purpose Only.



**MILLER RANCH**  
 Concept Plan  
 June 1, 2015

**DESCO Southwest**

**RICK**

**NORRIS DESIGN**

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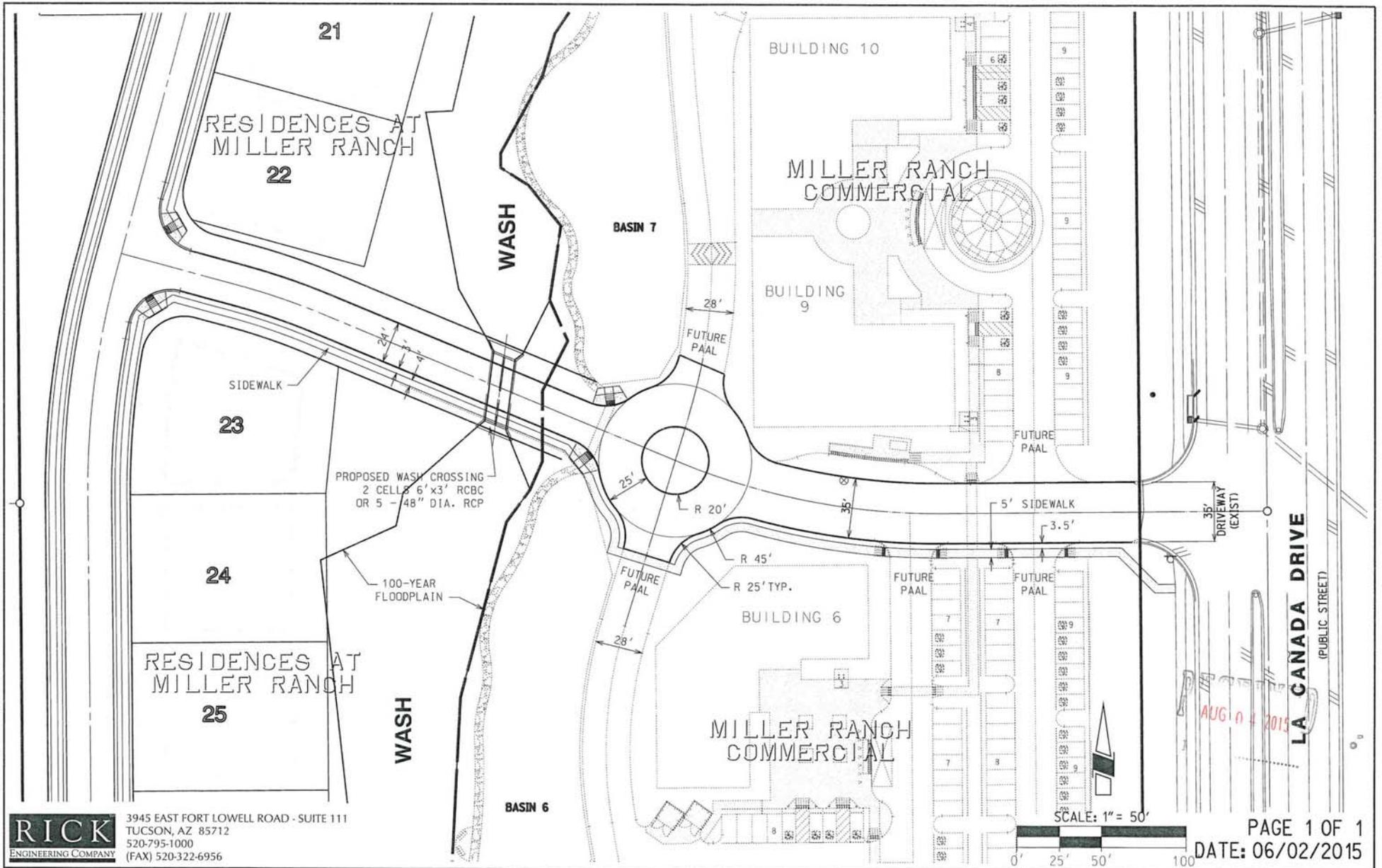
AUG 04 2015

SCALE: 1" = 50'



PAGE 1 OF 1  
DATE: 06/02/2015

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**RICK**  
ENGINEERING COMPANY

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SCALE: 1" = 50'

0' 25' 50' 100'

AUG 11 2015

LA CANADA DRIVE (PUBLIC STREET)

PAGE 1 OF 1  
DATE: 06/02/2015

# The Residences at Miller Ranch

## Rezoning Application

OV914-006

Submitted to:  
Town of Oro Valley  
Development and Infrastructure Services  
11000 N La Canada Drive  
Oro Valley, Arizona 85737

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Submittal #4  
April 17, 2015

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## PART 1 - INVENTORY AND ANALYSIS

### A. Existing Land Uses

#### 1. Site Location

Located within the Town of Oro Valley in Pima County, Arizona, the Residences at Miller Ranch site is located in Section 34, Township 11 South, Range 13 East, G. & S.R.M. Approximately 16.3 acres, the property is located west of La Cañada Drive, and north of Tangerine Road. *See Exhibit 1-A.1, Regional Context, p. 2.*

#### 2. Existing On-Site Land Uses

The Residences at Miller Ranch site is currently undeveloped. In February 2014 the Town of Oro Valley approved a General Plan Amendment for the subject property revising the land use category from Rural Low Density Residential (RLD, 0 - 0.3 DU/AC) and Low Density Residential (LDR, 0.4 - 1.2 DU/AC) to Medium Density Residential (MDR, 2.1 – 5.0 DU/AC) with a maximum allowable density of 2.5 DU/AC. As per the Town of Oro Valley Zoning Code, the property's current zoning is R1-144 (Single-Family Residential District). The proposed zoning for the property is R1-7 (Single-Family Residential District) with Environmentally Sensitive Lands (ESL) Development Incentives. *See Exhibit 1-A.2, Existing On-Site Land Uses, p. 3.*

Inventory and Analysis

Exhibit 1-A.1: Regional Context

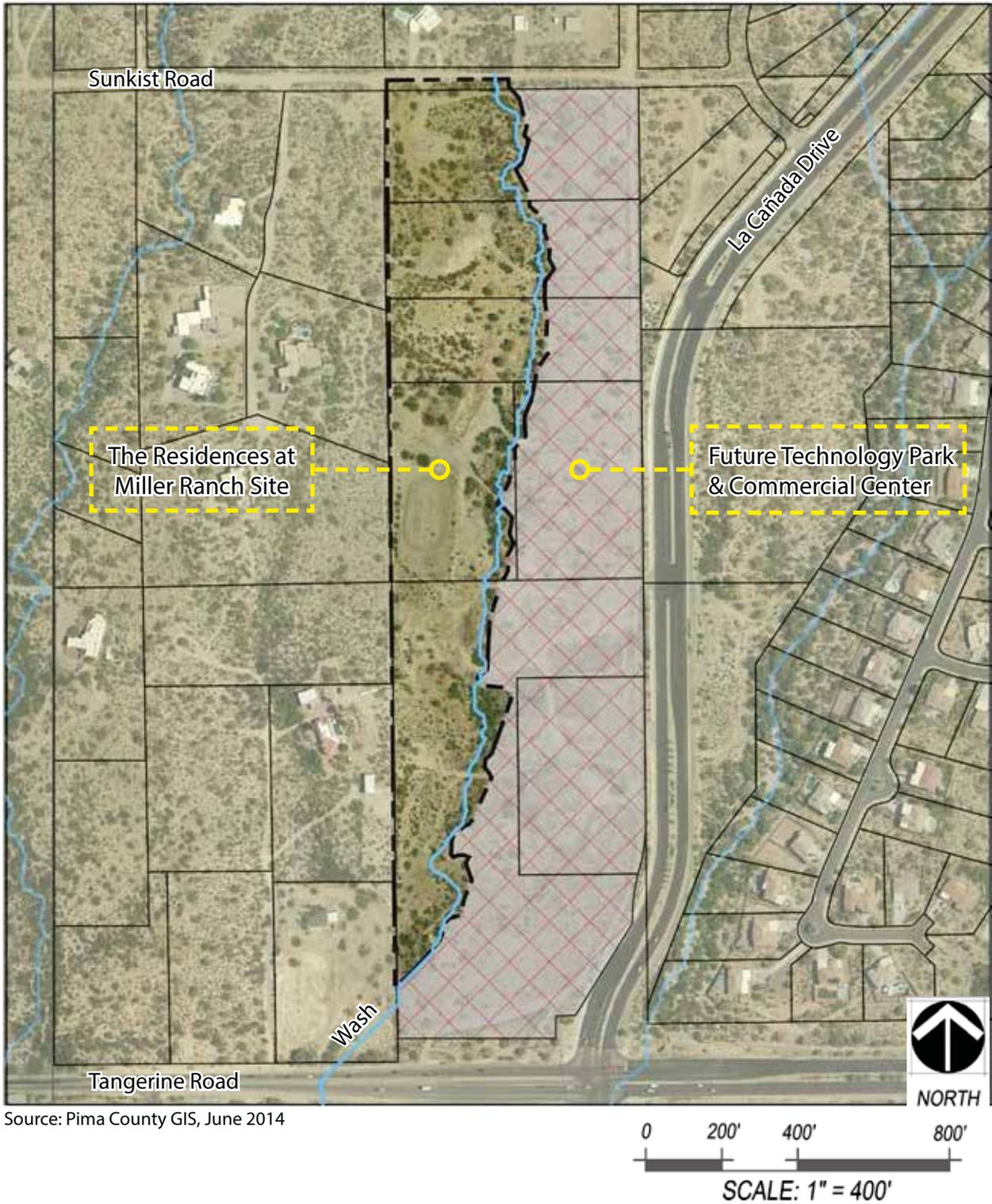


Source: Pima County GIS, June 2014



Inventory and Analysis

Exhibit 1-A.2: Existing On-Site Land Uses



Source: Pima County GIS, June 2014

## Inventory and Analysis

## 3. Contextual Information on Property within a 1/4 mile

The information in *Table 1-A.3, this page*, is provided for all property within a 1/4 mile radius of the Residences at Miller Ranch site.

TABLE 1-A.3: CONTEXTUAL INFORMATION ON PROPERTY WITHIN 1/4 MILE

Property	Zoning <sup>1</sup>	Land Use <sup>2</sup>	Building Heights*
The Residences at Miller Ranch	Rezone Request from R1-144 to R1-7	Currently Undeveloped; Medium Density Residential (MDR, 2.1 – 5.0 DU/AC)	NA
North, NW	SR	Rural Low Density Residential (RLD, 0 - 0.3 DU/AC)	34'
East	R1-144 R1-36 R1-20 T-P	Low Density Residential (LDR, 0.4 - 1.2 DU/AC and 1.3 - 2.0 DU/AC); Commerce/Office Park; Open Space; Significant Resource Area	18' - 34'
SE	R-4 R-6 C-1	Medium Density Residential (MDR, 2.1 - 5.0 DU/AC); High Density Residential (HDR, 5.0+ DU/AC); Public/Semi-Public	25' or 2 stories
South	R1-7	Medium Density Residential (MDR, 2.1 - 5.0 DU/AC); Significant Resource Area	25' or 2 stories
SW	R1-10	Medium Density Residential (MDR, 2.1 - 5.0 DU/AC)	25' or 2 stories
West	SR R1-144	Rural Low Density Residential (RLD, 0 - 0.3 DU/AC) and Low Density Residential (LDR, 0.4 - 1.2 DU/AC)	18' - 34'

<sup>1</sup> PIMA COUNTY GIS JUNE 2014<sup>2</sup> ORO VALLEY 2005 GENERAL PLAN

\* AS PER TOWN OF ORO VALLEY ZONING CODE

## a. Existing Zoning

See *Table 1-A.3, this page, and Exhibit 1-A.3, Existing Zoning, p. 5.*

## b. Existing Land Uses

See *Table 1-A.3, this page.*

## c. Heights of Existing Structures

See *Table 1-A.3, this page.*

## d. Pending Rezoning

Per Town of Oro Valley Planning, there are no pending rezonings.

## e. Conditionally Approved Zonings

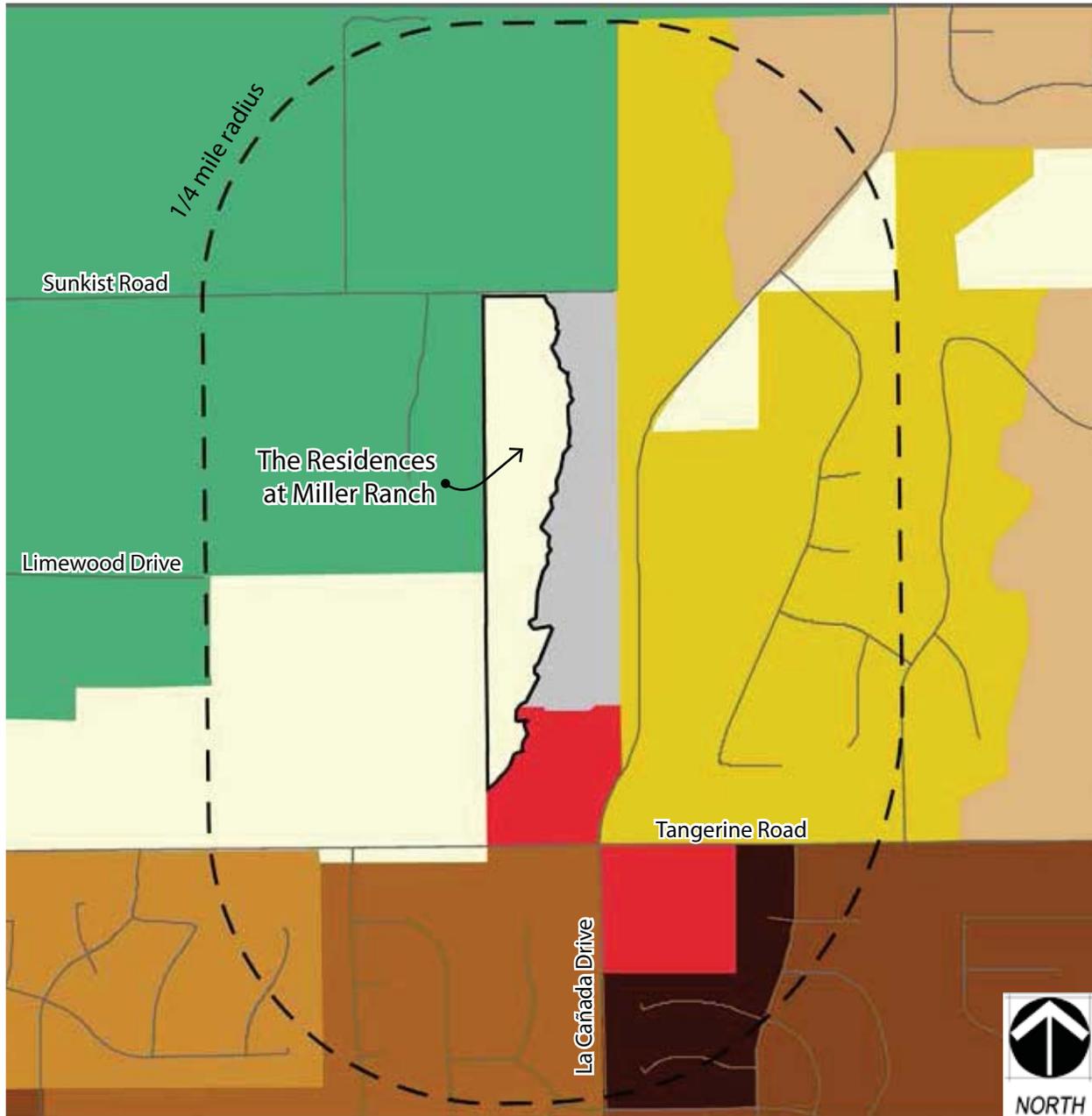
Per Town of Oro Valley Planning, there are no conditionally approved zonings.

## f. Subdivisions and/or Development Plans Approved

Per Town of Oro Valley Planning, there are no subdivisions/development plans approved. For existing subdivisions see *Exhibit 1-A.3f, Existing Subdivisions, p. 6.*

## g. Architectural Styles of Adjacent Structures

Traditional Southwestern Ranch per the Oro Valley Design Guidelines.



Source: Pima County GIS, June 2014

LEGEND

- SR: Suburban Ranch
- R1-144: Single Family Residential
- R1-36: Single Family Residential
- R1-20: Single Family Residential
- R1-10: Single Family Residential

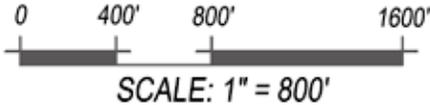
- R1-7: Single Family Residential
- R-4: Townhouse Residential
- R-6: Multi-Family Residential
- C1: Commercial District
- T-P: Technological Park

Inventory and Analysis

Exhibit 1-A.3f: Existing Subdivisions



Source: Pima County GIS, June 2014



4. Location and Ownership of wells/well sites (100' radius from site)

According to the Arizona Department of Water Resources, there are three (3) well sites within 100 feet of the site. All wells are owned by Desco-Miller, LLC and are currently abandoned. *See Exhibit 1-A.4, Wells within 100' of Site, p. 8.*

## B. Topography

1. Significant Site Topography

No significant natural topographic features are found on the Residences at Miller Ranch property. *See Exhibit 1-B.1, Topography, p. 9.*

a. Hillside Conservation Area

No Hillside Conservation Areas exist on the site.

b. Rock Outcroppings

No rock outcroppings exist on the site.

c. Slopes Greater than 15%

No slopes greater than 15% exist on the site.

d. Significant Topographic Features

No significant topographic features exist on the site.

2. Pre-Development Cross-Slope

A pre-development average cross slope analysis was performed using the Pima County methodology as noted below. The average cross slope for parcels located within the Residences at Miller Ranch site were calculated using Pima County Geographic Information Systems' cross slope calculator tool. The existing average cross slope for the entire site is 5.35%.

### Average Cross-slope Calculation

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

I = Contour Interval

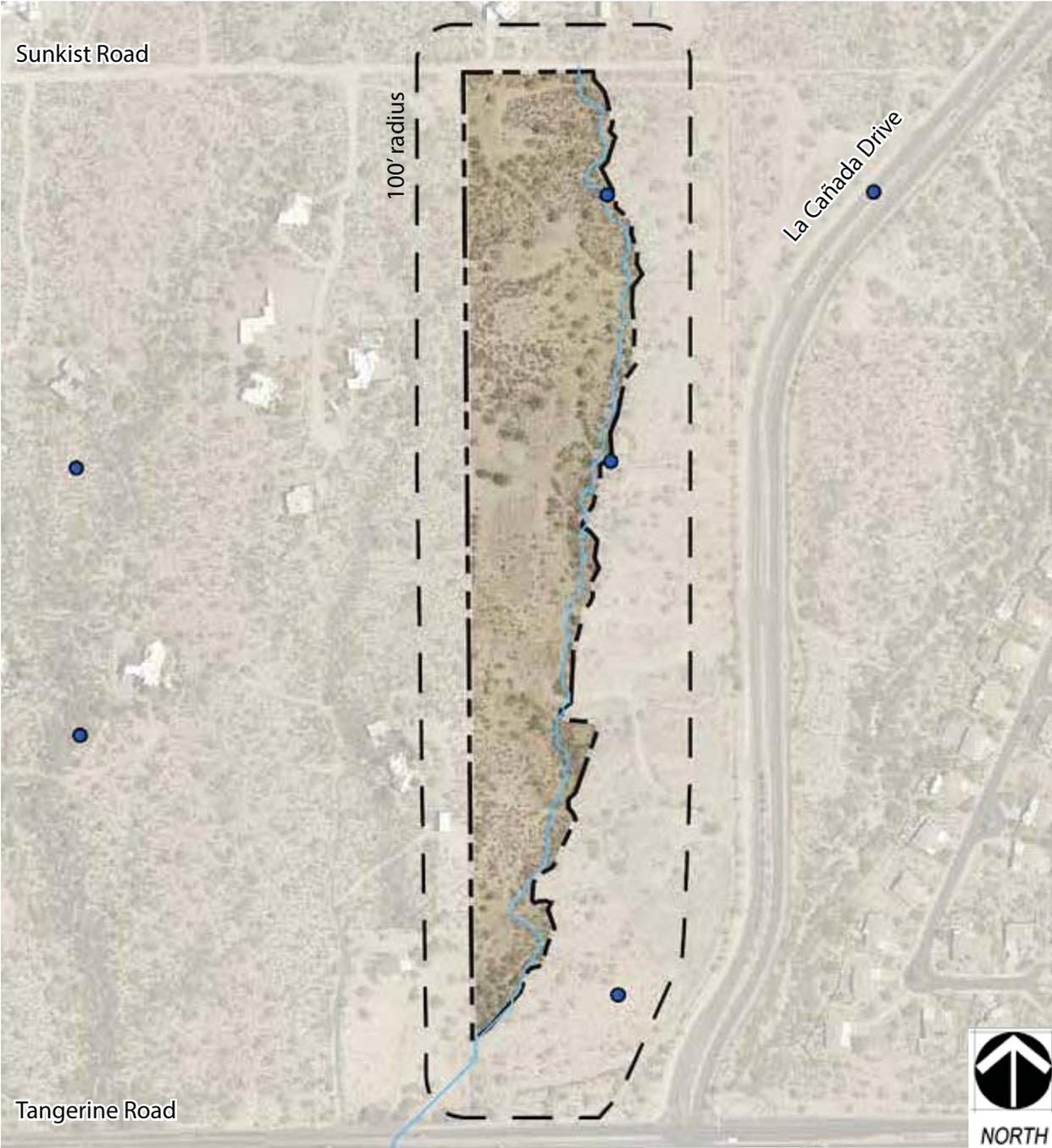
L = Contour Length

0.0023 = Constant to convert square feet  
to acres and slope to percent

A = Acres in Site

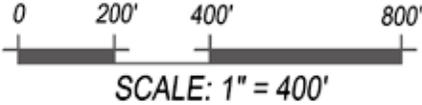
# Inventory and Analysis

Exhibit 1-A.4: Wells within 100' of Site



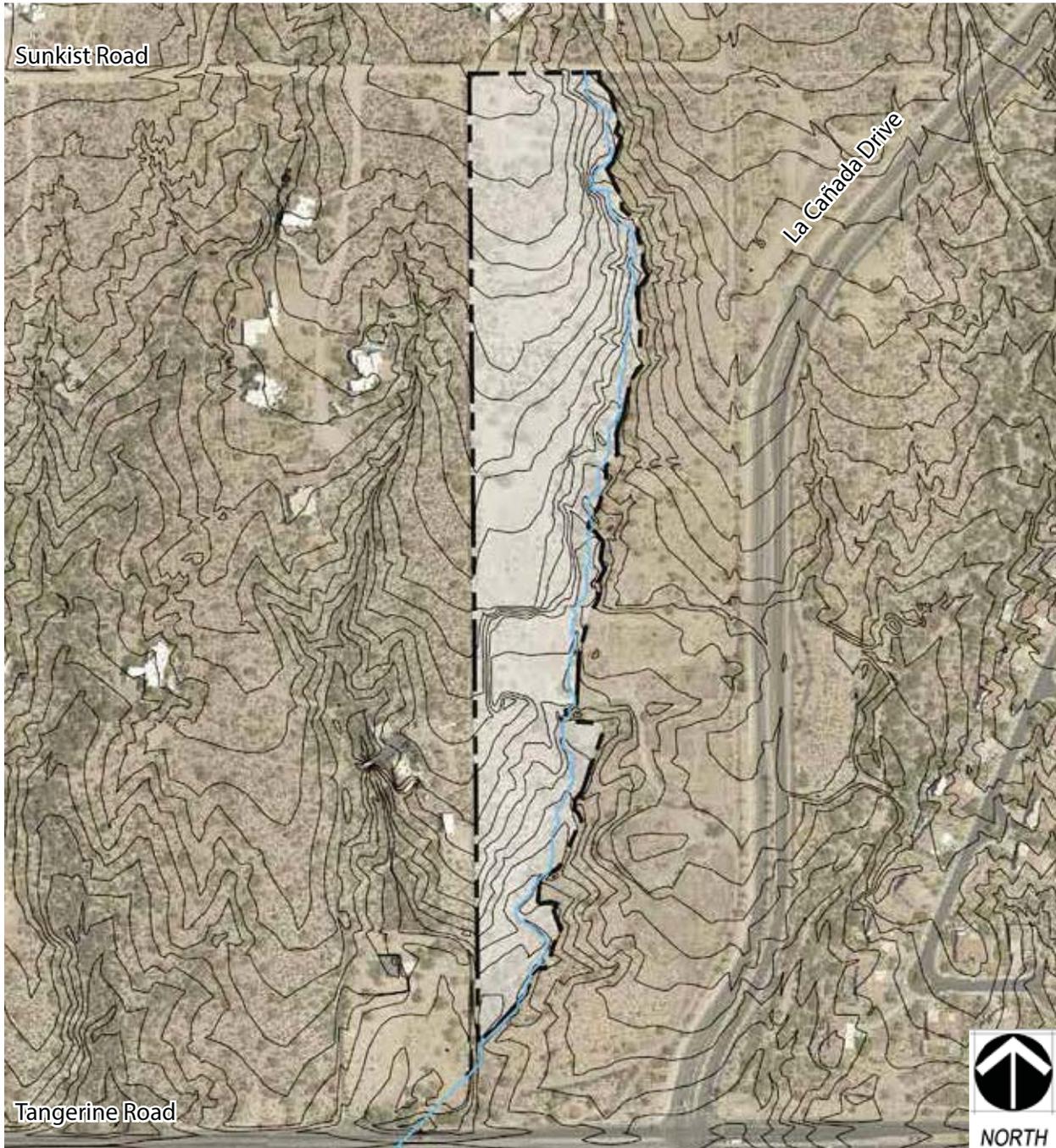
Source: Pima County GIS; Arizona Department of Water Resources, July 2014

- LEGEND
- Water Well



Inventory and Analysis

Exhibit 1-B.1: Topography



Source: Pima County GIS, July 2014

LEGEND

Contour Interval: 2'

## Inventory and Analysis

---

### C. Hydrology

#### 1. Off-Site Watersheds

There are seven (7) off-site watersheds that affect The Residences at Miller Ranch project See *Exhibit I.C.1: Off-Site Watersheds p. 13*. Off-site Watersheds 1 through 6 (OS-1 through OS-6) are undeveloped or developed for low density residential use. These six watersheds contribute flows to the unnamed wash along the east project boundary. Off-site Watershed 7 (OS-7) is developed for low density residential use. OS-7 combines with flow from the unnamed wash near the project southwest corner.

All off-site watersheds are located within Critical Basins. The areas within Town of Oro Valley jurisdiction are considered critical basins due to the Town's criteria that all basins shall be considered Critical Basins for the purpose of hydrological analysis and detention design. Areas outside Town of Oro Valley jurisdiction are considered Critical Basins as defined by Pima County Regional Flood Control District (per "Critical Basins within Unincorporated Pima County" map, effective 03/15/2007).

The nature and quantity of these off-site flows will be further evaluated in the drainage report(s) prepared for the development of the project. The necessary improvements to convey the flows will be determined at that time and will be incorporated into the drainage improvements for the development.

#### 2. Significant Off-Site Features

West Tangerine Road is located to the south of the project and North La Canada Drive is located to the east. Improvements associated with these roadways affect the quantity and location of the flows onto the site through the use of culverts, catch basins and other drainage structures. Flows at Concentration Point (CP) OS-7 are conveyed under West Tangerine Road by an existing culvert (see Exhibit I.C.1: Off-Site Watersheds). A portion of these flows are conveyed across West Tangerine Road due to the inadequate sizing of the existing 48" RCP culvert at this location. The backwater associated with this undersized culvert impacts the hydraulic characteristics of the unnamed wash near the project southwest corner.

Low density residential subdivisions exist to the north and west. Natural drainage patterns have generally been preserved with the development of these adjacent residential areas and minimal drainage infrastructure exists.

The proposed commercial development associated with the approved Master Development Plan for Miller Ranch (OV12-08-07) is located to the east, along the entire easterly boundary of this project. Detention is provided for this commercial development to satisfy Critical Basin criteria (per the Master Drainage Report for Miller Ranch prepared by Rick Engineering Company, dated May 19, 2010). The

drainage concept for the commercial development incorporates various detention basins along the existing wash with no encroachments into the existing floodplain.

### 3. Acreage of Upstream Off-Site Watersheds

Watershed OS-1 has a contributing area of 22.7-acres and a peak discharge of 133 cfs. Watershed OS-2 has a contributing area of 1.4-acres and a peak discharge of 11 cfs. Watershed OS-3 has a contributing area of 4.2-acres and a peak discharge of 31 cfs. Watershed OS-4 has a contributing area of 3.6-acres and a peak discharge of 27 cfs. Watershed OS-5 has a contributing area of 5.0-acres and a peak discharge of 37 cfs. Watershed OS-6 has a contributing area of 5.6-acres and a peak discharge of 42 cfs. Watershed OS-7 has a contributing area of 31.4-acres and associated peak discharge of 184 cfs. The cumulative peak discharge at CP OS-7 is 422 cfs.

The reported peak discharges were taken from approved studies, reports, and plans or were calculated based on hydrology methodology presented within the Town of Oro Valley Drainage Criteria Manual, 2010 edition. See *Exhibit I.C.1, Off-Site Watersheds*, p. 13, for the watersheds and concentration points described above.

### 4. On-Site Hydrology

The Residences at Miller Ranch project has five (5) on-site watersheds as delineated on *Exhibit I.C.2, Existing On-Site Hydrology*, p. 15. On-site Watersheds 1E through 4E generally drain from the west to the east and contribute flows to the regulatory floodplain (Q100 > 50cfs) that exists along the project east boundary. On-site Watershed 5E generally flows from east to west and discharges across the project west boundary. The project is located within a Critical Basin for the purposes of hydrological analysis.

#### a. On-site Regulatory Floodplains

The Residences at Miller Ranch project is impacted by a natural, unnamed wash along the project east boundary. The existing regulatory floodplain and associated erosion hazard setback is provided on *Exhibit I.C.2, Existing On-Site Hydrology*, p. 15. The existing 100-year peak discharge within the wash is 133 cfs at the north project boundary and 287 cfs where it discharges across the west boundary near the project southwest corner.

#### b. Areas of Sheet Flooding and Average Depth

The project is not impacted by sheet flooding.

#### c. Federally Mapped Floodways and Floodplains

According to FEMA Flood Insurance Rate Map (FIRM) number 04019C1090L (effective June 16, 2011), there are no Federally Mapped Floodways and Floodplains on the project. Refer to *Exhibit I.C.3, FEMA FIRM*, p. 17, for a portion of map referenced above.

## Inventory and Analysis

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d. 100-year Peak Discharges

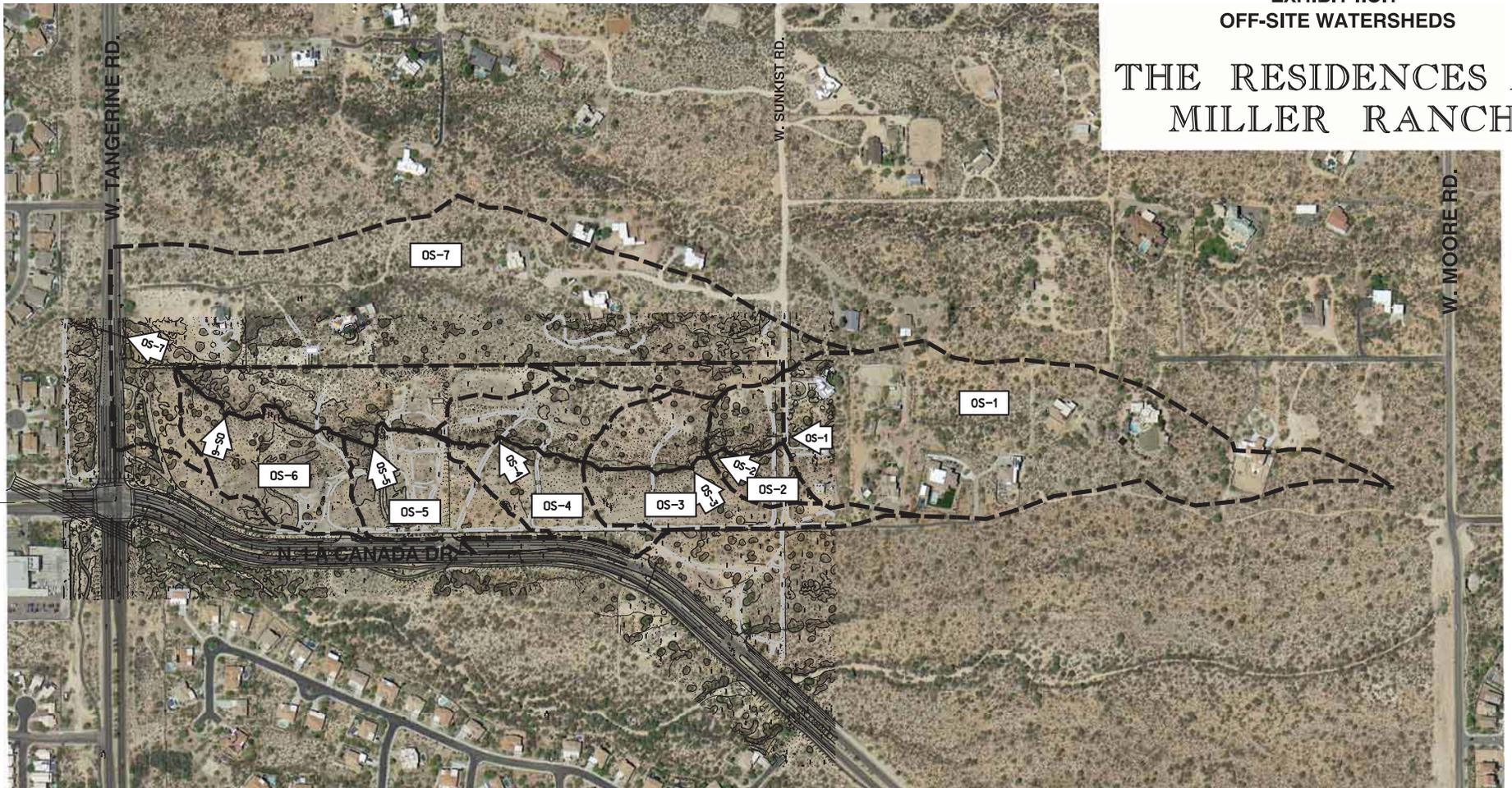
On-site Watershed 1E generates 13 cfs with a cumulative discharge of 150 cfs at CP 1E. On-site Watershed 2E generates 19 cfs with a cumulative discharge of 184 cfs at CP 2E. On-site Watershed 3E generates 27 cfs with a cumulative discharge of 218 cfs at CP 3E. On-site Watershed 4E generates 40 cfs with a cumulative discharge of 287 cfs at CP 4E. The existing 100-year peak discharge for On-site Watershed 5E is 14 cfs. Refer to *Exhibit I.C.2, Existing On-Site Hydrology, p. 15*.

5. Existing Downstream Drainage Conditions

All runoff originating on-site or originating off-site and conveyed through the site discharges across West Tangerine Road by way of an existing 48" RCP culvert and by flow overtopping the roadway at Concentration Point OS-7. The backwater associated with this roadway drainage crossing impacts the project southwest corner. The on-site regulatory floodplain discharges across the west, downstream boundary near the southwest project boundary and contributes flow to Concentration Point OS-7. *Exhibit I.C.2, Existing On-Site Hydrology, p. 15*.

EXHIBIT I.C.1  
OFF-SITE WATERSHEDS

THE RESIDENCES AT  
MILLER RANCH

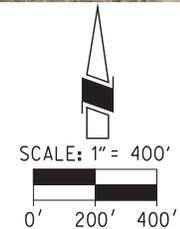


OFFSITE PEAK FLOWS			
WATERSHED	AREA	Q100	CUMULATIVE
CP's	[ac]	[cfs]	Q100 [cfs]
OS-1	22.7	133	-
OS-2	1.4	11	-
OS-3	4.2	31	-
OS-4	3.6	27	-
OS-5	5.0	37	-
OS-6	5.6	42	-
OS-7	31.4	184	422*

\* Per T.O.M. Proj. No. 2005-061  
"Tangerine Road-Thornycdale Road to La Canada Dr."

**LEGEND**

-  WATERSHED
-  CONCENTRATION POINT
-  WATERSHED BOUNDARY



DATE: 11/26/2014

PAGE 1 OF 1

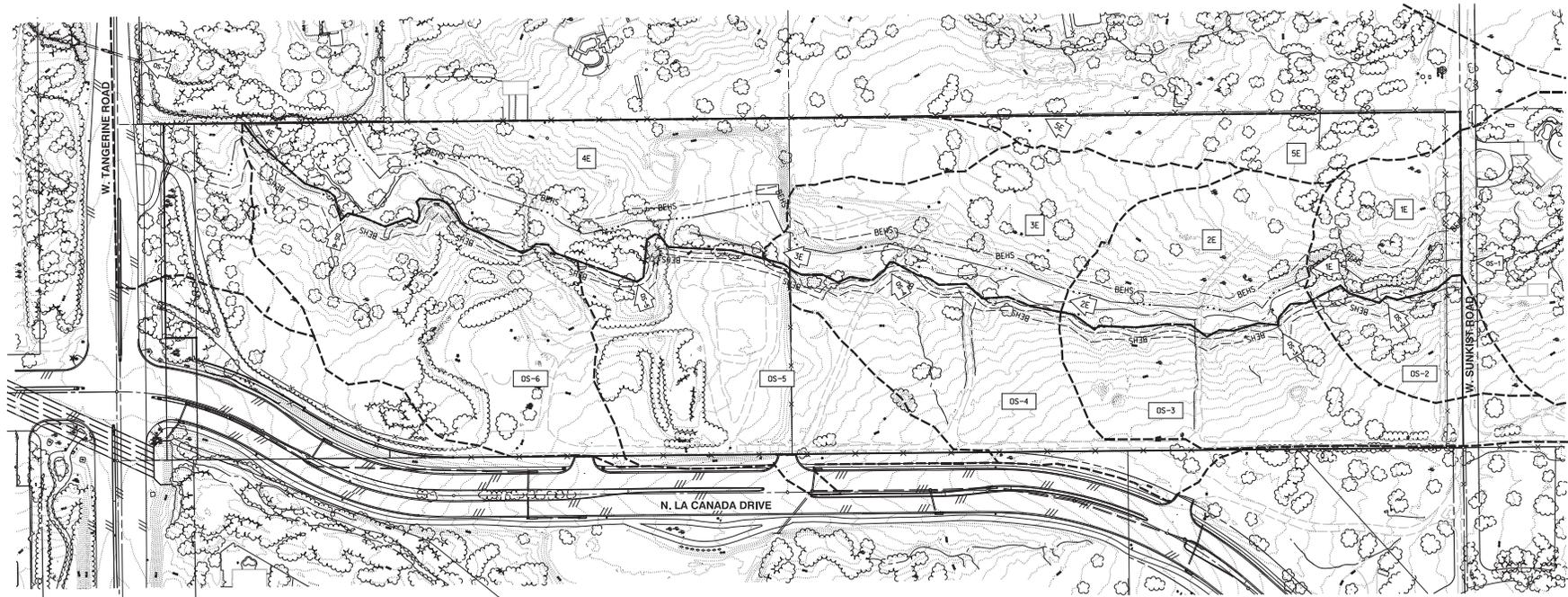
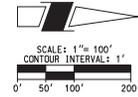


EXISTING PEAK FLOWS			
WATERSHED	AREA	Q100	CUMULATIVE
CP#s	[ac]	[cfs]	Q100 [cfs]
1E	1.7	13	150*
2E	2.7	19	164*
3E	3.7	27	218*
4E	6.3	40	287*
5E	11.9	14	--

\* Per HEC-HMS model

OFFSITE PEAK FLOWS			
WATERSHED	AREA	Q100	CUMULATIVE
CP#s	[ac]	[cfs]	Q100 [cfs]
OS-1	22.7	133	--
OS-2	1.4	11	--
OS-3	4.2	31	--
OS-4	3.6	27	--
OS-5	5.0	37	--
OS-6	6.6	42	--
OS-7	31.7	184	422*

\* Per T.G.M. Proj. No. 2005-061 "Tangerine Road-Thornycroft Road to La Canada Dr."



**LEGEND**

- 1 WATERSHED
- CONCENTRATION POINT
- WATERSHED BOUNDARY
- BUILDING EROSION HAZARD SETBACK
- REGULATORY 100-YEAR FLOOD LIMITS (EXISTING)

**EXHIBIT I.C.2**  
EXISTING ON-SITE HYDROLOGY  
**THE RESIDENCES AT MILLER RANCH**

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 11 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN, TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA.

OV114-020 DATE: 11/26/2014 SHEET 1 OF 1

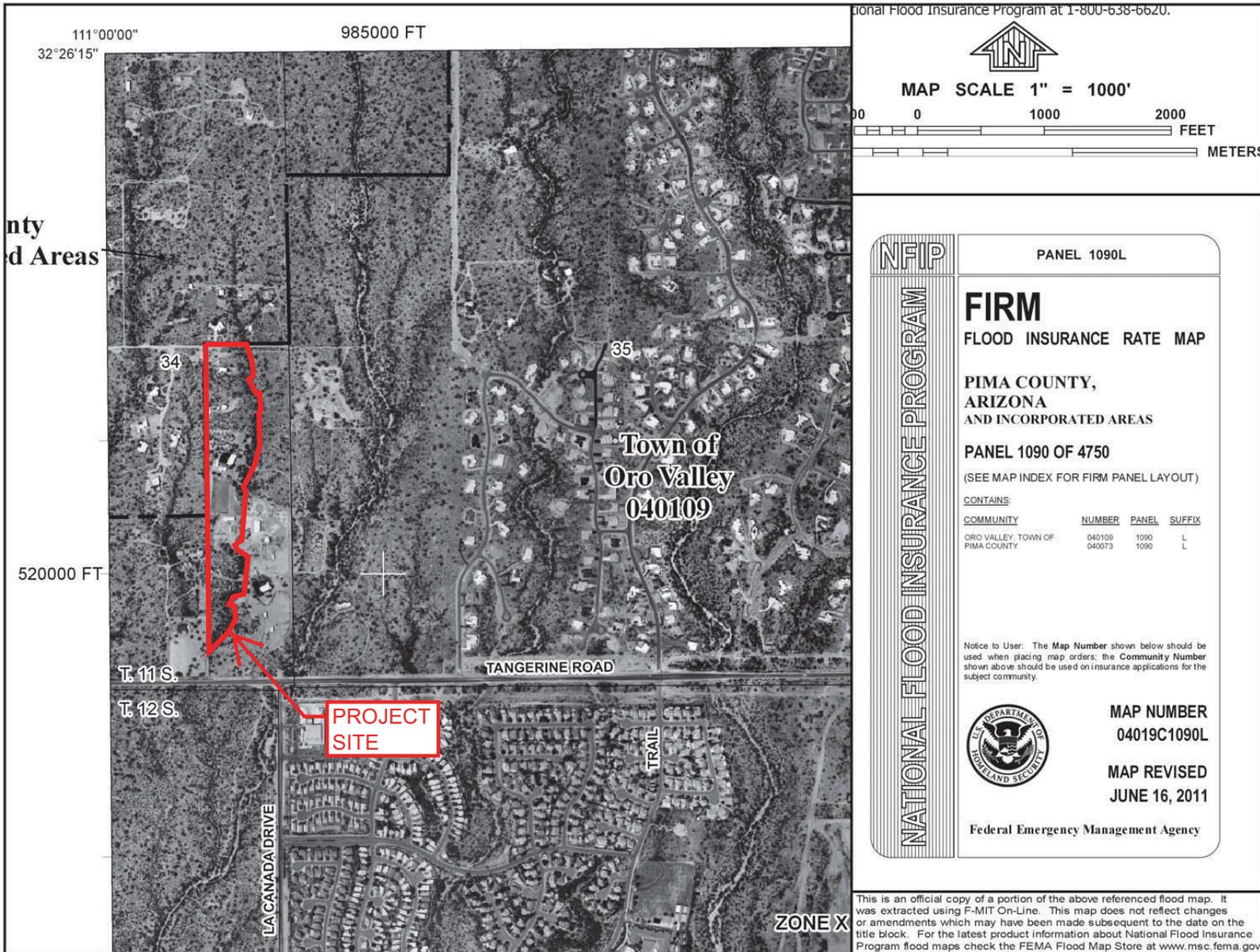


Exhibit I.C.3 - FEMA FIRM

## D. Vegetation

### 1. Vegetative Communities and Associations on the Site

The Residences at Miller Ranch site consists primarily of native vegetation characteristic of the Arizona Uplands subdivision of the Sonoran Desert-Scrub biotic community. Pima County Geographic Information Systems classifies the site as “Sonoran Desert-Scrub; Paloverde-Mixed Cacti (Arizona Uplands) Series”. *See Exhibit 1-D.1a, Vegetative Communities, p. 20.*

The wash comprising the site’s eastern boundary is classified as “Sonoran Riparian Scrub” and designated as “Xeroriparian C Habitat”. *See Exhibit 1-D.1b, Riparian Habitat, p. 21.*

A Biological Evaluation completed by Westland Resources Inc., Engineering and Environmental Consultants in April, 2008 identifies common plant species observed within the project site. *See Table 1-D.1, Common Plant Species, this page.* A copy of the Biological Evaluation is provided *under separate cover.*

TABLE 1-D.1: COMMON PLANT SPECIES

Scientific Name	Common Name	Oro Valley Protected Native Plant List	Legal Protection
<i>Acacia constricta</i>	Whitehorn Acacia	N	
<i>Acacia greggii</i>	Catclaw Acacia	Y	
<i>Ambrosia dumosa</i>	Common Bursage	Y	
<i>Baccharis sarothroides</i>	Desert Broom	N	
<i>Carnegiea gigantea</i>	Saguaro	Y	NPL-SR
<i>Celtis spinosa</i>	Desert Hackberry	Y	
<i>Ferocactus wislizenii</i>	Fishhook Barrel Cactus	Y	NPL-SR
<i>Larrea tridentata</i>	Creosote	Y	
<i>Opuntia engelmannii</i>	Prickly Pear Cactus	Y	NPL-SR
<i>Opuntia</i> spp.	Cholla	Y	SR
<i>Parkinsonia floridum</i>	Blue Palo Verde	Y	NPL-SA
<i>Parkinsonia microphyllum</i>	Foothill Palo Verde	Y	NPL-SA
<i>Prosopis velutina</i>	Velvet Mesquite	Y	NPL-HR/SA

Key:

NPL - Plants regulated by the Arizona Native Plant Law

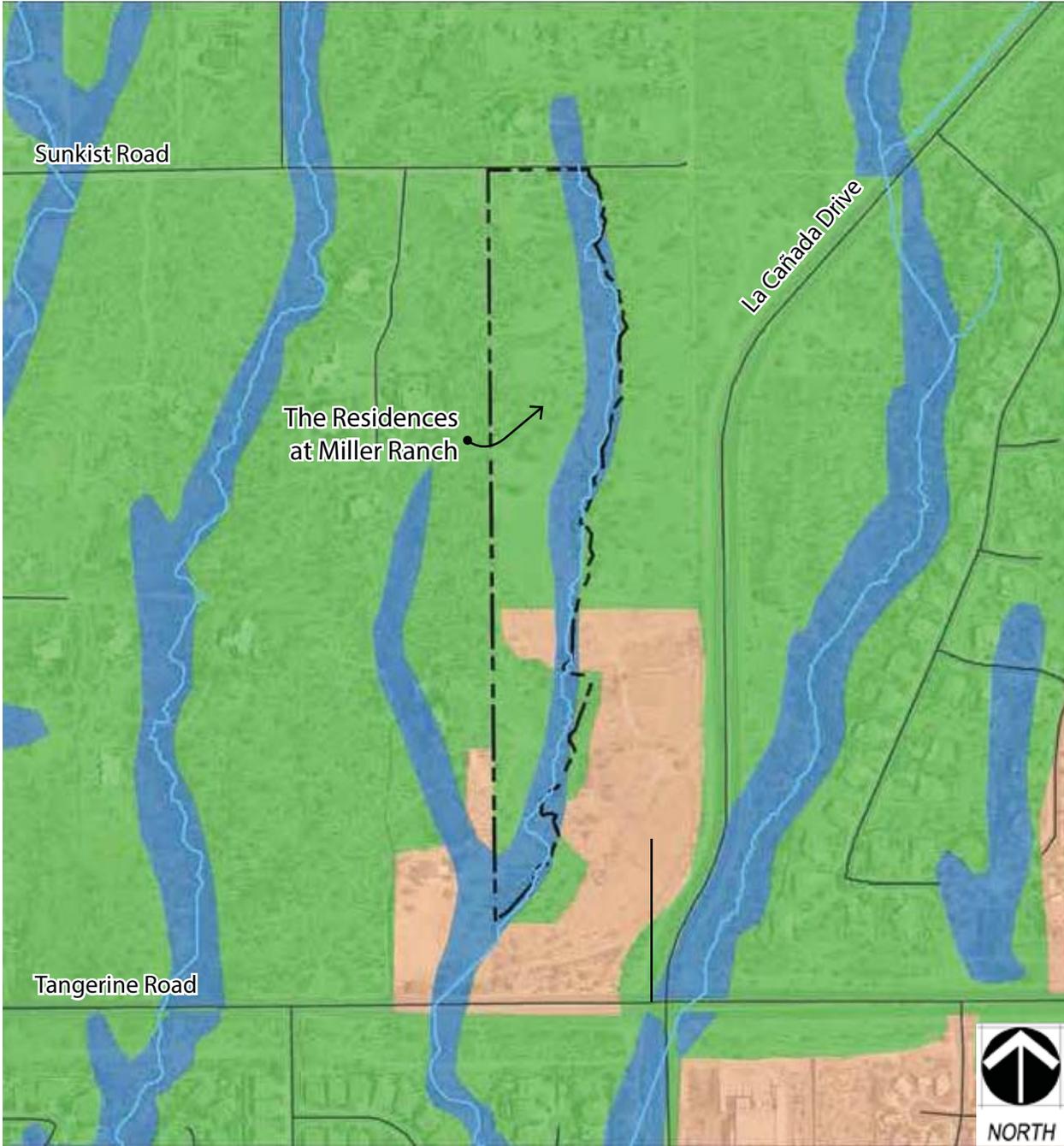
HR - Harvest Restricted

SR - Salvage Restricted

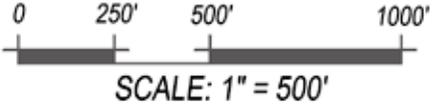
SA - Salvage Assessed

Inventory and Analysis

Exhibit 1-D.1a: Vegetative Communities



Source: Pima County GIS, July 2014

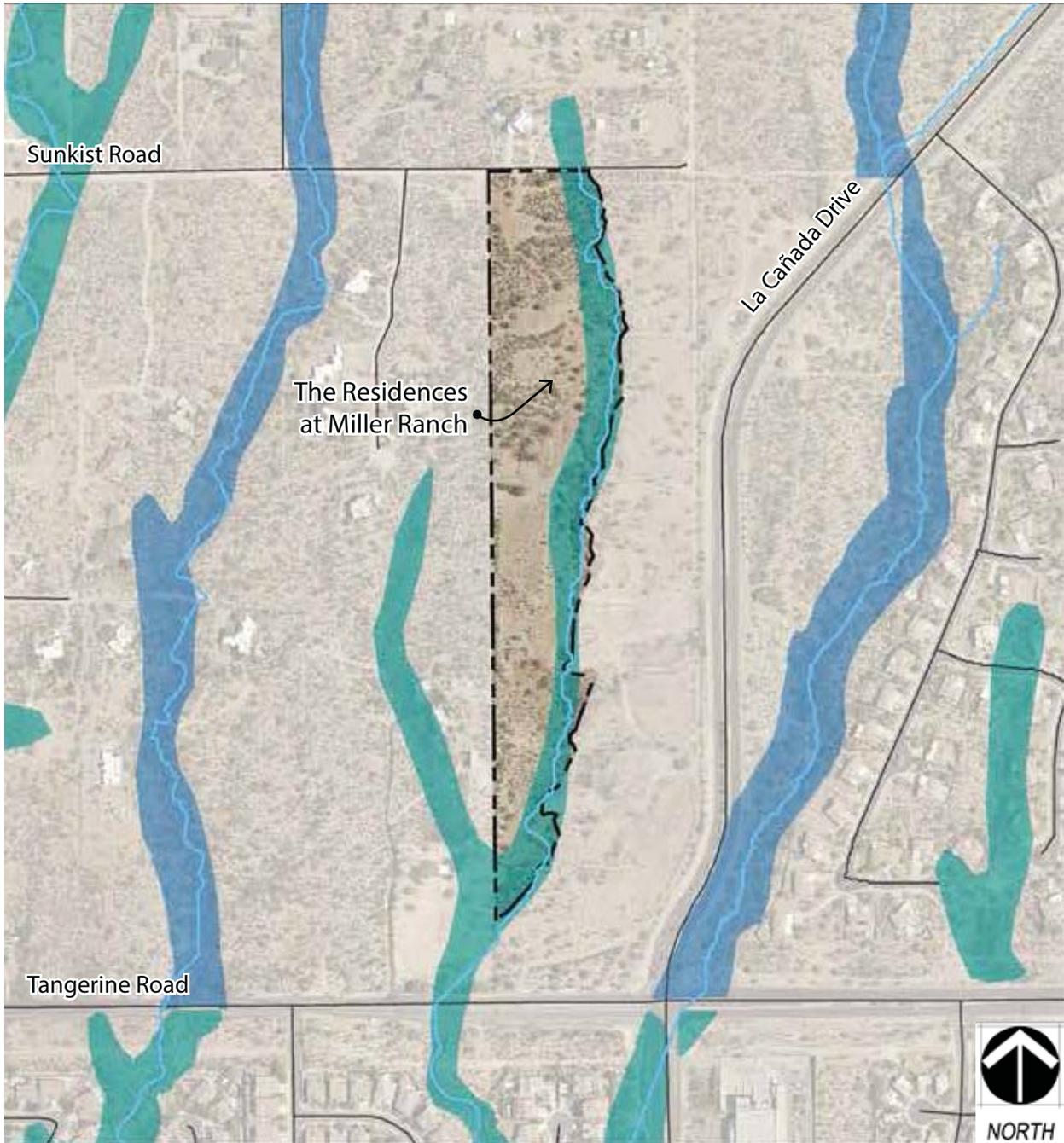


LEGEND

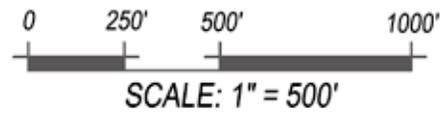
-  Sonoran Riparian Scrub
-  Sonoran Desert Scrub; Paloverde / Mixed Cacti (Arizona Uplands) Series
-  Agriculture / Developed / Water / Bare Ground

Inventory and Analysis

Exhibit 1-D.1b: Riparian Habitat



Source: Pima County GIS, June 2014



LEGEND

-  Xeroriparian B: Vegetative volume less than or equal to  $0.856 \text{ M}^3/\text{M}^2$  and greater than  $0.675 \text{ M}^3/\text{M}^2$
-  Xeroriparian C: Vegetative volume less than or equal to  $0.675 \text{ M}^3/\text{M}^2$  and greater than  $0.675 \text{ M}^3/\text{M}^2$

## Inventory and Analysis

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2. **Significant Vegetation and Federally-Listed Threatened or Endangered Species**  
Please refer to the Site Resource Inventory (SRI) and Native Plant Preservation Plan (NPPP) for information regarding “Significant Vegetation” as defined by the General Development Standards listed in the Oro Valley Zoning Code (Section 27.6, Landscape Conservation).

The Arizona Game and Fish Department’s Heritage Data Management System (HDMS) does not identify any plant species of Special Status within three (3) miles of the project vicinity. *See Exhibit 1-E.2, Arizona Game and Fish Department Letter, p. 28.*

3. **Vegetative Densities**  
Vegetative densities slightly vary across the site with most dense areas being located along the eastern site boundary’s wash and northwest corner. Through on-site observation, densities were qualified into two (2) categories: (1) Low Density: ground coverage density between 0 and 25%, and Medium-Low Density: ground coverage density between 26% and 50%. *See Exhibit 1-D.3, On-Site Vegetative Densities, p. 23.*

Inventory and Analysis

Exhibit 1-D.3: On-Site Vegetative Densities



Source: Site Observation, April 2014

LEGEND

-  Low Density (0 - 25%)
-  Medium-Low Density (26% - 50%)

## Inventory and Analysis

---

### E. Wildlife

#### 1. Presence of State-Listed Threatened or Endangered Species

According to the Arizona Game and Fish Department, the Residences at Miller Ranch site lies in the vicinity of proposed critical habitat of the Golden Eagle, Cactus Ferruginous Pygmy-Owl, Sonoran Desert Tortoise, and the Lesser Long-Nosed Bat. See *Table 1-E.1a, Species of Special Status, this page, and Table 1-E.1b, Status Definitions, p. 25*. The United States Fish and Wildlife Service identifies the Lesser Long-Nosed Bat (LLNB) as Listed Endangered (LE), a status designated for species in imminent jeopardy of extinction, however no critical habitat has been designated for this species. A Biological Evaluation completed by WestLand Resources, Inc., Engineering and Environmental Consultants in April, 2008 includes a detailed analysis of this special-interest species (a copy of the Biological Evaluation is provided *under separate cover*.) The LLNB is the only species within the report determined to have potential for occurrence on the property due to their ability to forage over long distances and the availability of foraging resources on site, such as saguaros. See *Exhibit 1-E.1a, Lesser Long-nosed Bat Habitat Model, p. 26*. The report concludes that there are no foreseeable adverse impacts likely to result from the implementation of this project due to the site's limited number of saguaros and the abundance of suitable forage resources (saguaros, landscaped agave, hummingbird feeders) throughout the Tucson Basin.

The Residences at Miller Ranch site also lies within a three mile radius of the planned Tucson - Tortolita - Santa Catalina Mountains Linkage Design, a wildlife corridor serving to reconnect critical habitat. See *Exhibit 1-E.1.b, Wildlife Corridors, p. 27 and Exhibit 1-E.2, Arizona Game and Fish Department Letter, p. 28*.

TABLE 1-E.1A: SPECIES OF SPECIAL STATUS

Scientific Name	Common Name	FSW	USFS	BLM	State
<i>Aquila chrysaetos</i>	Golden Eagle	BGA		S	
<i>Glaucidium brasilianum cactorum</i>	Cactus Ferruginous Pygmy-Owl	SC	S	S	WSC
<i>Gopherus morafkai</i>	Sonoran Desert Tortoise	C*	S		WSC
<i>Leptonycteris curasoae yerbabuenae</i>	Lesser Long-Nosed Bat	LE			WSC

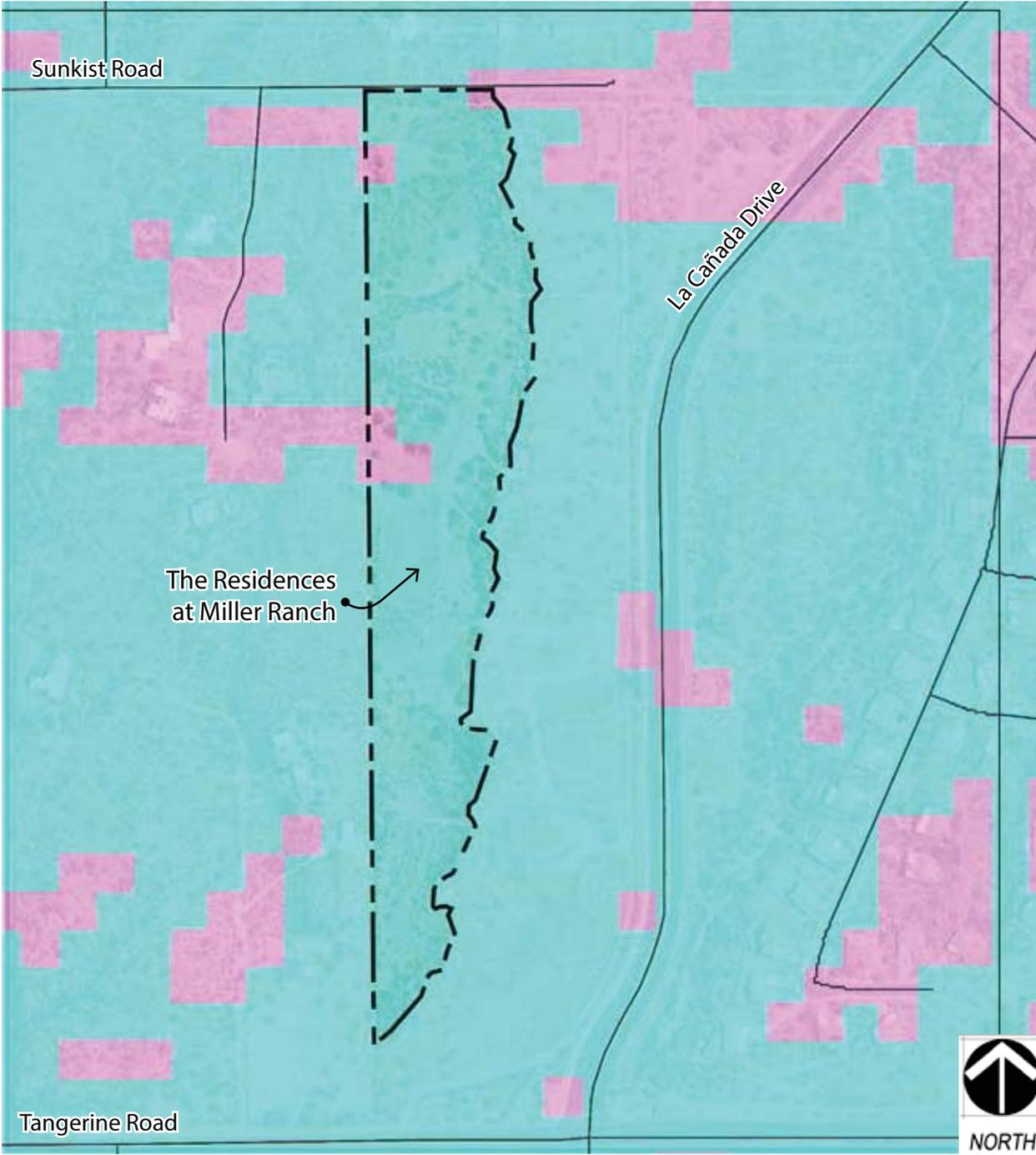
## Inventory and Analysis

TABLE 1-E.1B: STATUS DEFINITIONS

Agency	Status	Definition
FWS (Fish and Wildlife Service, Federal US Status; Endangered Species Act, 1973 as amended)	BGA: Bald and Golden Eagle Protection	Prohibits take of bald and golden eagles without prior USFWS permit.
	SC: Species of Concern	The terms "Species of Concern" or "Species at Risk" should be considered as terms-of-art that describe the entire realm of taxa whose conservation status may be of concern to the US Fish and Wildlife Service, but neither term has official status (currently all former C2 species).
	C*: Candidate	The Service identifies species for which they made a continued warranted-but-precluded finding on a resubmitted petition by the code "C*" in the category column. This code was put into use starting in 2008.
	LE: Listed Endangered	Imminent jeopardy of extinction.
USFS (US Forest Service, US Department of Agriculture)	S: Sensitive	Those taxa occurring on National Forests in Arizona which are considered sensitive by the Regional Forester.
BLM (US Bureau of Land Management, US Department of the Interior)	S: Sensitive	Those taxa occurring on BLM Field Office Lands in Arizona which are considered sensitive by the Arizona State Office.
State - WSCA (Wildlife of Special Concern in Arizona, 1996 in prep, Arizona Game and Fish Department)	WCS: Wildlife of Special Concern in Arizona	Species whose occurrence in Arizona is or may be in jeopardy, or with known or perceived threats or population declines, as described by the Arizona Game and Fish Department's listing of Wildlife of Special Concern in Arizona (WSCA, in prep). Species indicated on printouts as WC are currently the same as those in Threatened Native Wildlife in Arizona (1988).

Inventory and Analysis

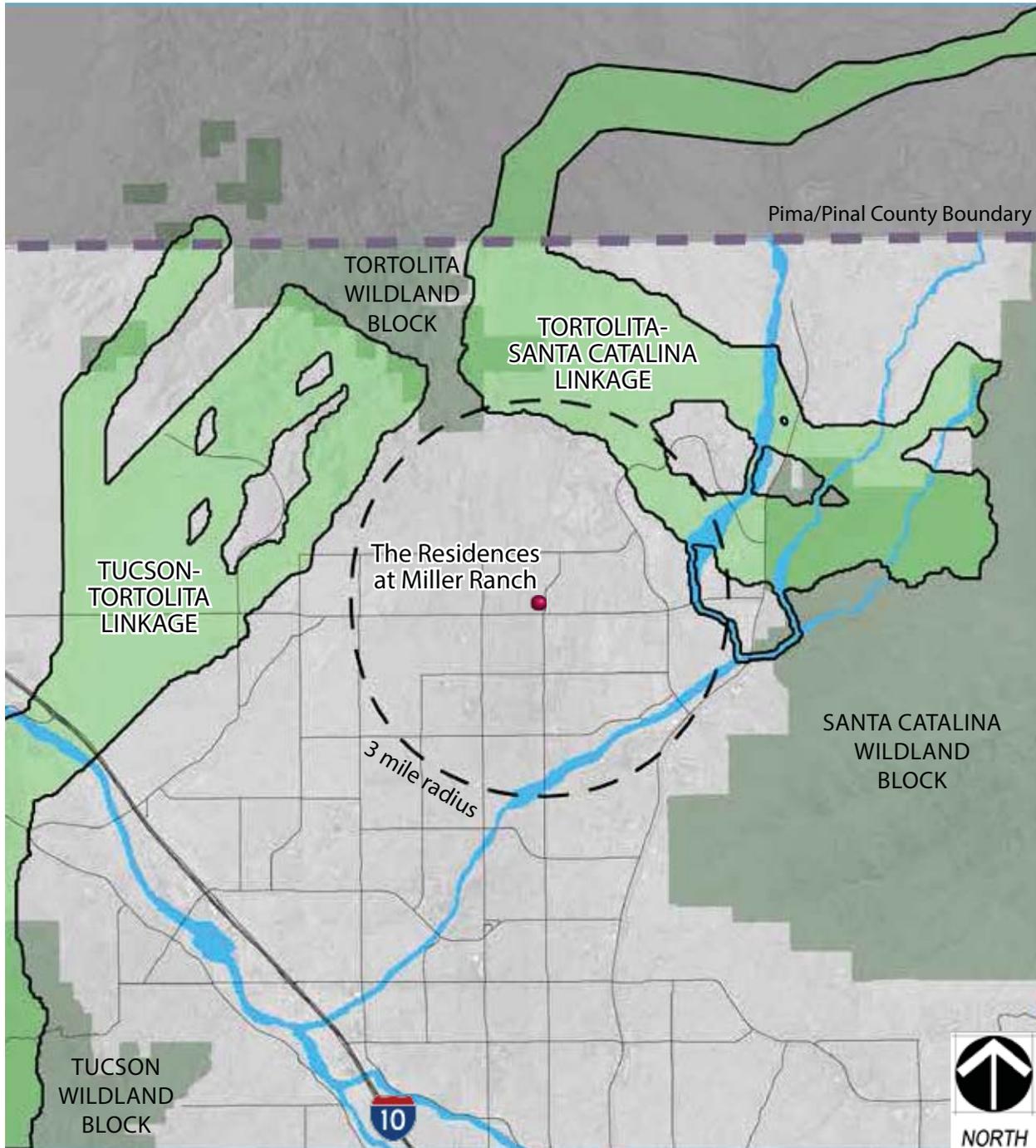
Exhibit 1-E.1a: Lesser Long-Nosed Bat Habitat Model



Source: Pima County GIS, July 2014

LEGEND

- High Value Habitat
- Medium Value Habitat



Source: Pima County GIS, July 2014; \*1



\*1  
Beir, P., E. Garding, and D. Majka. 2006. Arizona Missing Linkages: Tucson -Tortolita - Santa Catalina Mountains Linkage Design. Report to Arizona Game and Fish Department. School of Forestry, Northern Arizona University.

Inventory and Analysis

Exhibit 1-E.2: Arizona Game and Fish Department Letter

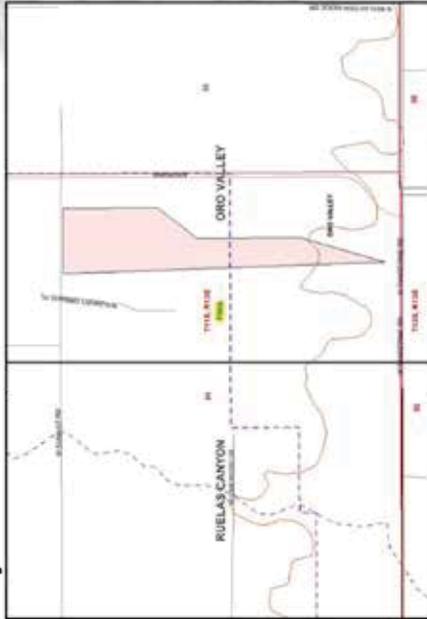
Arizona's On-line Environmental Review Tool

Search ID: 20140618023733

Project Name: The Residences at Miller Ranch

Date: 6/18/2014 2:37:11 PM

**Project Location**



**Project Name:** The Residences at Miller Ranch

**Submitted By:** Christian Sobacki

**On behalf of:** PRIVATE

**Project Search ID:** 20140618023733

**Date:** 6/18/2014 2:37:07 PM

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

**Project Coordinates (UTM Zone 12-NAD 83):** 500274.924, 3587953.209 meter

**Project Area:** 16.441 acres

**Project Perimeter:** 1699.113 meter

**County:** PIMA

**USGS 7.5 Minute Quadrangle ID:** 1684

**Quadrangle Name:** ORO VALLEY

**Project locality is not anticipated to change**

**Location Accuracy Disclaimer**

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

The Department appreciates the opportunity to provide in-depth comments and project review when additional information or environmental documentation becomes available.

**Special Status Species Occurrences/Critical Habitat/Tribal Lands within 3 miles of Project Vicinity:**

Name	Common Name	FWS	USFS	BLM	State
Aquila chrysaetos	Golden Eagle	BGA		S	
Glaucoedum brasilianum caedorum	Cactus Ferruginous Pygmy-owl	SC	S	S	WSC
Gopherus morafkai	Sonoran Desert Tortoise	C*	S		WSC
Lepidonyx curasoae yerbabuena	Lesser Long-nosed Bat	LE			WSC
Tucson - Tortolita - Santa Catalina Mountains Linkage Design	Wildlife Corridor				

## Inventory and Analysis

## Exhibit 1-E.2: Arizona Game and Fish Department Letter

## Arizona's On-line Environmental Review Tool

Search ID: 20140618023733

Project Name: The Residences at Miller Ranch

Date: 6/18/2014 2:37:11 PM

**Please review the entire receipt for project type recommendations and/or species or location information and retain a copy for future reference.** If any of the information you provided did not accurately reflect this project, or if project plans change, another review should be conducted, as this determination may not be valid.

**Arizona's On-line Environmental Review Tool:**

1. This On-line Environmental Review Tool inquiry has generated recommendations regarding the potential impacts of your project on Special Status Species (SSS) and other wildlife of Arizona. SSS include all U.S. Fish and Wildlife Service federally listed, U.S. Bureau of Land Management sensitive, U.S. Forest Service sensitive, and Arizona Game and Fish Department (Department) recognized species of concern.

2. These recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation). These recommendations are preliminary in scope, designed to provide early considerations for all species of wildlife, pertinent to the project type you entered.

3. This receipt, generated by the automated On-line Environmental Review Tool does not constitute an official project review by Department biologists and planners. Further coordination may be necessary as appropriate under the National Environmental Policy Act (NEPA) and/or the Endangered Species Act (ESA).

The U.S. Fish and Wildlife Service (USFWS) has regulatory authority over all federally listed species under the ESA. Contact USFWS Ecological Services Offices: <http://arizonaes.fws.gov/>.

Phoenix Main Office  
2321 W. Royal Palm Road, Suite 103  
Phoenix, AZ 85021  
Phone 602-242-0210  
Fax 602-242-2513

Tucson Sub-Office  
201 North Bonita, Suite 141  
Tucson, AZ 85745

Phone 520-670-6144  
Fax 520-670-6154

Flagstaff Sub-Office  
323 N. Leroux Street, Suite 101  
Flagstaff, AZ 86001

Phone 928-226-0614  
Fax 928-226-1099

**Disclaimer:**

1. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area.
2. The Department's Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there.
3. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. HDMS data contains information about species occurrences that have actually been reported to the Department.

**Arizona Game and Fish Department Mission**

**To conserve, enhance, and restore Arizona's diverse wildlife resources and habitats through aggressive protection and**

Page 2 of 7 APPLICATION INITIALS: \_\_\_\_\_

Inventory and Analysis

Exhibit 1-E.2: Arizona Game and Fish Department Letter

Arizona's On-line Environmental Review Tool  
 Search ID: 20140618023733  
 Project Name: The Residences at Miller Ranch  
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*management programs, and to provide wildlife resources and safe watercraft and off-highway vehicle recreation for the enjoyment, appreciation, and use by present and future generations.*

Control districts may be required.  
 Based on the project type entered; coordination with State Historic Preservation Office may be required  
<http://azstateparks.com/SHPO/index.html>

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

Based on the project type entered; coordination with U.S. Army Corps of Engineers may be required  
 (<http://www.spl.usace.army.mil/regulatory/phonedir.html>)

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.

**Project Type Recommendations:**

All degraded and disturbed lands should be restored to their natural state. 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.

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.water.az.gov/adwr/>)

Based on the project type entered; coordination with County Flood

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 at  
<http://www.azgfd.gov/hgis/guidelines.aspx>.

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.

## Inventory and Analysis

## Exhibit 1-E.2: Arizona Game and Fish Department Letter

## Arizona's On-line Environmental Review Tool

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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 and after project activities to reduce the spread of invasive species. 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 <http://www.azda.gov/PSD/quarantine5.htm>. Additionally, the U.S. Department of Agriculture has information regarding pest and invasive plant control methods including: pesticide, herbicide, biological control agents, and mechanical control: <http://www.usda.gov/wps/portal/usdahome>. The Department regulates the importation, purchasing, and transportation of wildlife and fish (Restricted Live Wildlife), please refer to the hunting regulations for further information [http://www.azgfd.gov/hunting\\_rules.shtml](http://www.azgfd.gov/hunting_rules.shtml).

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.

Hydrological considerations: 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. Aquatic wildlife considerations: reduce/minimize barriers to migration of amphibians or fish (e.g. eliminate falls). 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 at <http://www.azgfd.gov/hgis/guidelines.aspx>.

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 (including 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.

Planning: consider impacts of lighting intensity on mammals and birds 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.

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## Inventory and Analysis

## Exhibit 1-E.2: Arizona Game and Fish Department Letter

## Arizona's On-line Environmental Review Tool

Search ID: 20140618023733

Project Name: The Residences at Miller Ranch

Date: 6/18/2014 2:37:11 PM

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.

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

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.

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 herpetofauna (snakes, lizards, tortoise) from entering ditches.

**Project Location and/or Species recommendations:**

Heritage Data Management System 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 (refer to page 1 of the receipt). Please contact:

Ecological Services Office  
US Fish and Wildlife Service  
2321 W. Royal Palm Rd.  
Phoenix, AZ 85021-4951  
Phone: 602-242-0210  
Fax: 602-242-2513

HDMS records indicate your project is in or near an identified wildlife habitat linkage corridor. Project planning and implementation efforts should focus on maintaining adequate opportunities for wildlife permeability. For information on the linkage assessment and wildlife species that may be affected refer to:  
<http://www.corridordesign.org/arizona>. Contact your Arizona Game and Fish Department Regional Office for specific project recommendations: [http://www.azgfd.gov/inside\\_azgfd/agency\\_directory.shtml](http://www.azgfd.gov/inside_azgfd/agency_directory.shtml)

**Recommendations Disclaimer:**

1. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project.
2. These recommendations are proposed actions or guidelines to be considered during **preliminary project development**.
3. Additional site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. The Department is interested in the conservation of all fish and wildlife resources, including those Special Status Species listed on this receipt, and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
6. **Further coordination requires the submittal of this initialed and signed Environmental Review Receipt with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map).**

Arizona's On-line Environmental Review Tool  
Search ID: 20140618023733  
Project Name: The Residences at Miller Ranch  
Date: 6/18/2014 2:37:11 PM

7. Upon receiving information by AZGFD, please allow 30 days for completion of project reviews. Mail requests to:

**Project Evaluation Program, Habitat Branch**  
**Arizona Game and Fish Department**  
**5000 West Carefree Highway**  
**Phoenix, Arizona 85086-5000**  
**Phone Number: (623) 236-7600**  
**Fax Number: (623) 236-7366**

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1. This Environmental Review and project planning website was developed and intended for the purpose of screening projects for potential impacts on resources of special concern. By indicating your agreement to the terms of use for this website, you warrant that you will not use this website for any other purpose.
2. Unauthorized attempts to upload information or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.
3. The Department reserves the right at any time, without notice, to enhance, modify, alter, or suspend the website and to terminate or restrict your access to the website.
4. This Environmental Review is based on the project study area that was entered. The review must be redone if the project study area, location, or the type of project changes. If additional information becomes available, this review may need to be reconsidered.
5. A signed and initialed copy of the Environmental Review Receipt

indicates that the entire receipt has been read by the signer of the Environmental Review Receipt.

**Security:**

The Environmental Review and project planning web application operates on a complex State computer system. This system is monitored to ensure proper operation, to verify the functioning of applicable security features, and for other like purposes. Anyone using this system expressly consents to such monitoring and is advised that if such monitoring reveals possible evidence of criminal activity, system personnel may provide the evidence of such monitoring to law enforcement officials. Unauthorized attempts to upload or change information; to defeat or circumvent security measures; or to utilize this system for other than its intended purposes are prohibited.

This website maintains a record of each environmental review search result as well as all contact information. This information is maintained for internal tracking purposes. Information collected in this application will not be shared outside of the purposes of the Department.

If the Environmental Review Receipt and supporting material are not mailed to the Department or other appropriate agencies within six (6) months of the Project Review Receipt date, the receipt is considered to be null and void, and a new review must be initiated.

Print this Environmental Review Receipt using your internet browser's print function and keep it for your records. Signature of this receipt indicates the signer has read and understands the information provided.

Signature: \_\_\_\_\_

Inventory and Analysis

Exhibit 1-E.2: Arizona Game and Fish Department Letter

Arizona's On-line Environmental Review Tool  
Search ID: 20140618023733  
Project Name: The Residences at Miller Ranch  
Date: 6/18/2014 2:37:11 PM

Date: \_\_\_\_\_

Proposed Date of Implementation: \_\_\_\_\_

Please provide point of contact information regarding this Environmental Review.

*Application or organization responsible for project implementation*

Agency/organization: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_

Person Conducting Search (if not applicant)

Agency/organization: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_



## F. Viewsheds

### 1. Views Onto and Across the Site from Adjacent Properties

Views onto the site from adjacent properties to the north, east, west, and south are shown in *Exhibit 1-F.1 Views onto Site, p. 37*. Anticipated impact on viewsheds from the proposed developments are described in *Table 1-F.1, Views onto Site, this page*.

TABLE 1-F.1: VIEWS ONTO SITE

#	View	Anticipated Impact
1	From property north of site, looking south	The majority of existing vegetation will remain along the south side of Sunkist Drive, except where minimal clearing will need to be done to allow for an emergency access easement. The area will be enhanced with native plant species creating a landscaped buffer between Sunkist Drive and side yard walls of future Miller Ranch homes.
2	From La Cañada Drive, looking west	Some existing vegetation east of the site will be cleared for the development of the Technology Park & Commercial Center as well as the main project entry road for the Residences at Miller Ranch. Enhancement/supplementation of vegetation in the riparian area will increase overall vegetative density between the Technology Park & Commercial Center and the Residences at Miller Ranch.
3	From Tangerine Road, looking north	Enhancement of the riparian area and landscaping will screen the site's southern most homes from Tangerine Road.
4	From property west of site, looking east	An enhanced vegetation buffer will aid in screening the road and homes along the western site boundary. Attempts will be made through the use of setbacks, architecture and home placement to preserve distant views of the Santa Catalina Mountains.

### 2. Areas of High Visibility from Off-site Locations

The Residences at Miller Ranch site does not include any areas that would be considered highly visible as most views onto the site are filtered by vegetation.

### 3. Impact of Proposed Structures on Existing Landscapes

A photo-simulation of proposed structures on-site is shown in *Exhibit 1-F.3, Visual Impacts of Proposed Structures, p. 39*.

Photo Locater Map



① View onto the site looking west from La Cañada Drive at existing median break north of proposed access road.



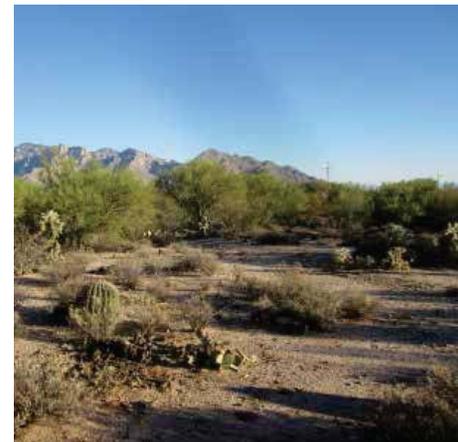
② View onto the site looking west from La Cañada Drive at existing median break and proposed location of main entry access road.



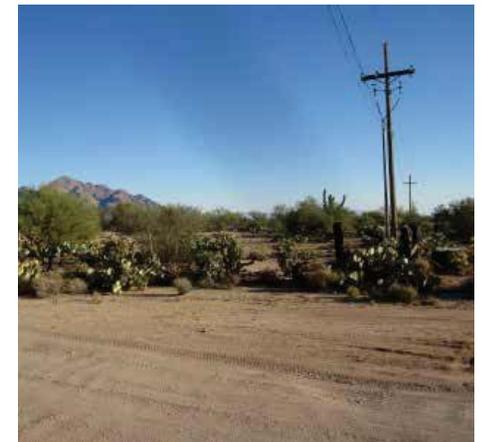
③ View onto the site looking northwest from the intersection of two closest arterial streets, La Cañada Drive and Tangerine Road.



④ View onto the site looking northeast from Tangerine Road shortly before road transitions from two to four lanes heading eastward.

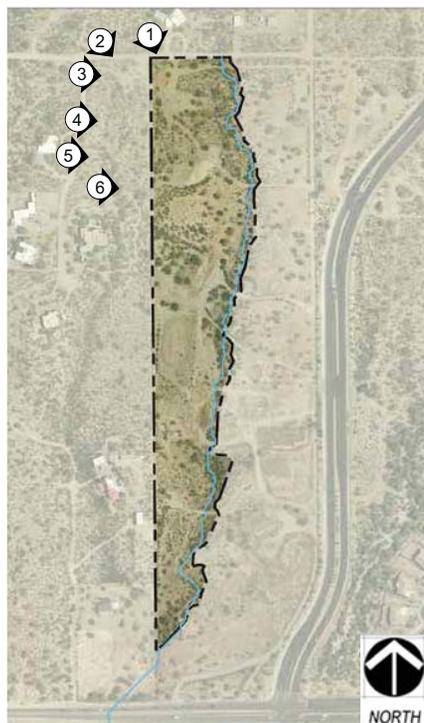


⑤ View onto the site looking east from adjacent residential properties located outside of the site's western boundary.



⑥ View onto the site looking southeast from residential properties located outside the site's northwest corner.

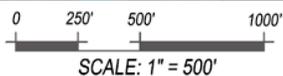
Photo Locater Map



Source:  
Site Observation

LEGEND

Point of view



① Existing / Proposed



④ Existing / Proposed



② Existing / Proposed



⑤ Existing / Proposed



③ Existing / Proposed



⑥ Existing / Proposed



The Residences at Miller Ranch  
August 2014 - Revised April 2015

## G. Traffic

### 1. Existing and Proposed Off-site Streets

The Residences at Miller Ranch is generally located at the northwest corner of the Tangerine Road and La Cañada Drive intersection. Both of these roads are classified as urban minor arterials. Currently there are no existing off-site roads located between the subject property and these two (2) arterial roadways. The project proposes the development of 30 single-family residential units. The site proposes to take primary access from La Cañada Drive via a full-turn intersection at an existing median break. It should be noted that there is an approved future commercial component located to the east between the residential and La Cañada Drive. Phase I of the commercial development proposes about 19,800 sf of commercial retail, 6,000 sf of bank use and 67,900 sf general office use. Phase I commercial development proposes to take access to Tangerine Road via a proposed right in right out driveway and to La Cañada Drive via a proposed full access driveway and a right –in right-out driveway. The opening year of the commercial component is unknown at this time. In addition, the proposed La Canada Ridge subdivision (33 dwelling units) located just north of the Miller Ranch development is an approved project that is anticipated to be constructed in the near future. Although the TIA has been prepared to evaluate the Miller Ranch residential component, the analysis also includes an analysis scenario that assumes both the Miller Ranch Commercial - Phase I and La Canada Ridge Subdivision are built. *See Exhibit 1-G.1, Proposed Access and On-Site Vehicular Circulation, p. 43.*

### 2. Arterial Streets within 1 mile of the Project Site

Tangerine Road is an east-west roadway and “Urban Principal Arterial” serving the site. The posted speed limit is 45 mph and no on-street parking is provided. There is a traffic signal at its intersection with La Canada Drive. The existing right-of-way width is 300’, which conforms to minimum Oro Valley requirements. Between La Cañada Drive and Oracle Road (SR 77), Tangerine Road is four-lane, divided cross section with a raised median, paved shoulders, and exclusive left-turn bays at median openings. West of La Cañada Drive, Tangerine Road transitions into a two-lane, undivided cross section with unpaved shoulders for approximately ten miles before widening back to a four-lane divided cross section at the I-10 underpass. The Town of Oro Valley currently has plans to widen the ten mile stretch of road between La Cañada Drive and Interstate 10 from two to four lanes with sidewalks and multi use lanes, known as the Tangerine Road Corridor Project. Construction is expected to start in 2016. None of these improvements will directly affect the access to the project.

As per the official FHWA-approved Functional Classification Map (2009), there are two other arterial streets located within a one mile radius of the Residences at Miller Ranch site. Classified as “Urban Minor Arterial” these north-south oriented roads are the adjacent La Cañada Drive and La Cholla Boulevard located to the west. *See Table 1-G.2a, Existing Arterial Streets within 1 Mile Radius, p. 42, and Exhibit 1-G.2a, Road Improvements an Arterials within 1 Mile Radius, p. 44.*

## Inventory and Analysis

Existing traffic volumes at the project area intersection of La Cañada Drive/Tangerine Road were obtained from traffic counts conducted by Field Data Services of Arizona on Wednesday, March 19, 2014. The turning movement counts were conducted during the AM (7-9) and PM (4-6) periods. *Exhibit 1-G.2b, Existing Traffic Volumes, p. 46*, shows the existing intersection turning movement counts within the study area. Manual turning movement count sheets are provided under separate cover within the Miller Ranch Residential Development Traffic Impact Analysis by Rick Engineering Company. *Table 1-G.2b, Existing (2014) Intersection Operations, this page*, shows that the signalized intersection of La Cañada Drive/Tangerine Road to currently operate at LOS C during the AM and PM peak periods.

TABLE 1-G.2A: EXISTING ARTERIAL STREETS WITHIN 1 MILE RADIUS

Road	Class	Cross-Section	Ownership	Speed	Right of Way
Tangerine Road	Urban Principal Arterial	Four Lane Divided with Paved Shoulder	Town of Oro Valley	45 mph	300'
La Cañada Drive	Urban Minor Arterial	Four Lane Divided with Paved Shoulder	Town of Oro Valley	45 mph	150'
La Cholla Boulevard	Urban Minor Arterial	Two Lane Undivided with unpaved shoulder	Town of Oro Valley	45 mph	150'

SOURCE: FHWA, SITE OBSERVATION, JULY 2014

TABLE PARAMETERS BASED UPON ROAD SEGMENTS CLOSEST TO SITE

Tangerine Road ADT = 18,900 (Year 2016)

La Cañada Drive ADT = 16,100 (Year 2016)

TABLE 1-G.2B: EXISTING (2014) INTERSECTION OPERATIONS

Intersection	Existing (2014)	
	DELAY	LOS
Tangerine Road / La Cañada Drive (S)		
AM Peak	27.8	C
PM Peak	27.9	C

Source: Rick Engineering Company, August 2014

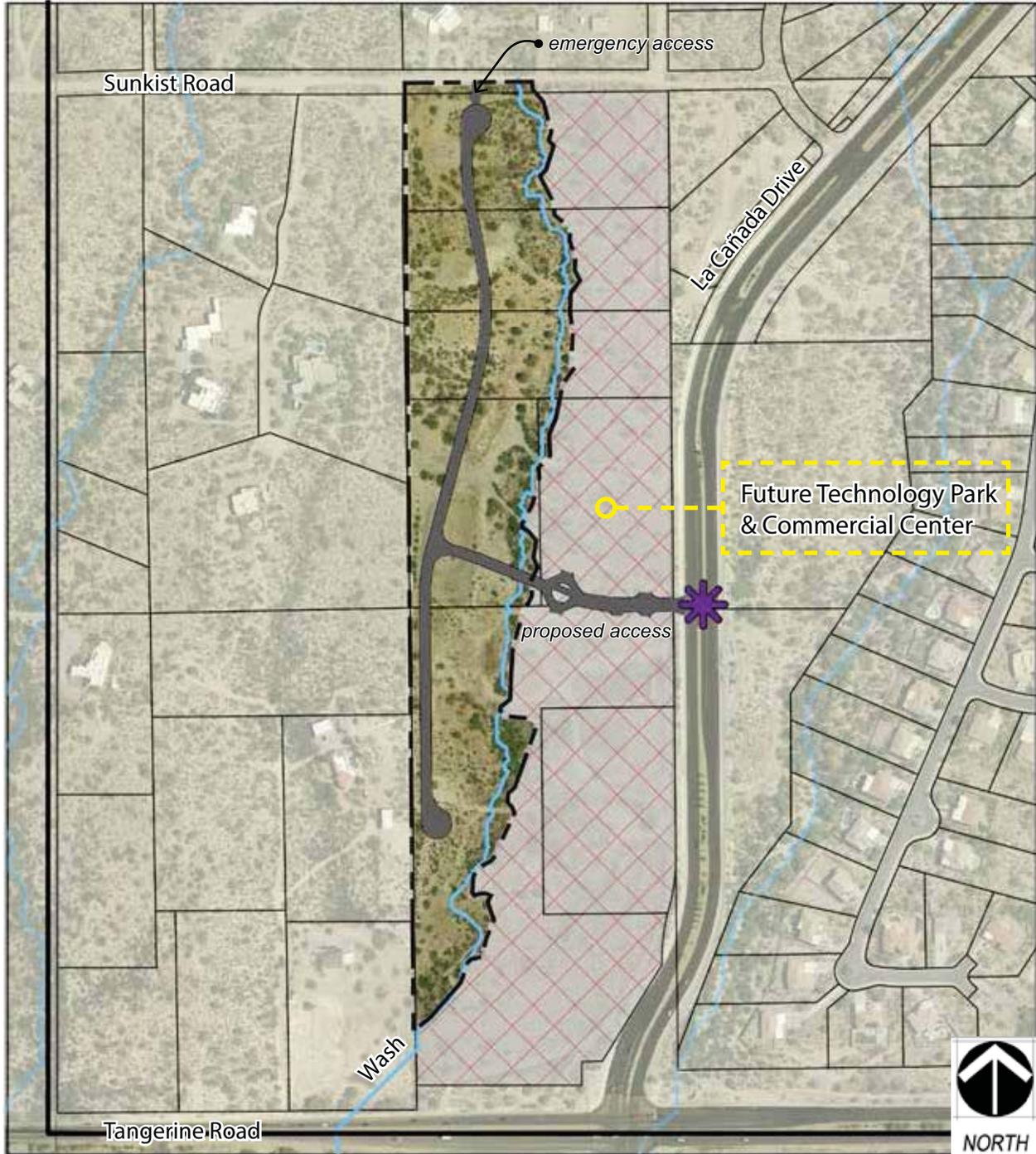
- Delays and Level of Service calculated utilizing the methodologies described in Chapters 16 & 17 of the 2000 Highway Capacity Manual (HCM).

DELAY is measured in seconds

LOS = Level of Service

(S) = Signalized Intersection

Exhibit 1-G.1: Proposed Access and On-Site Vehicular Circulation



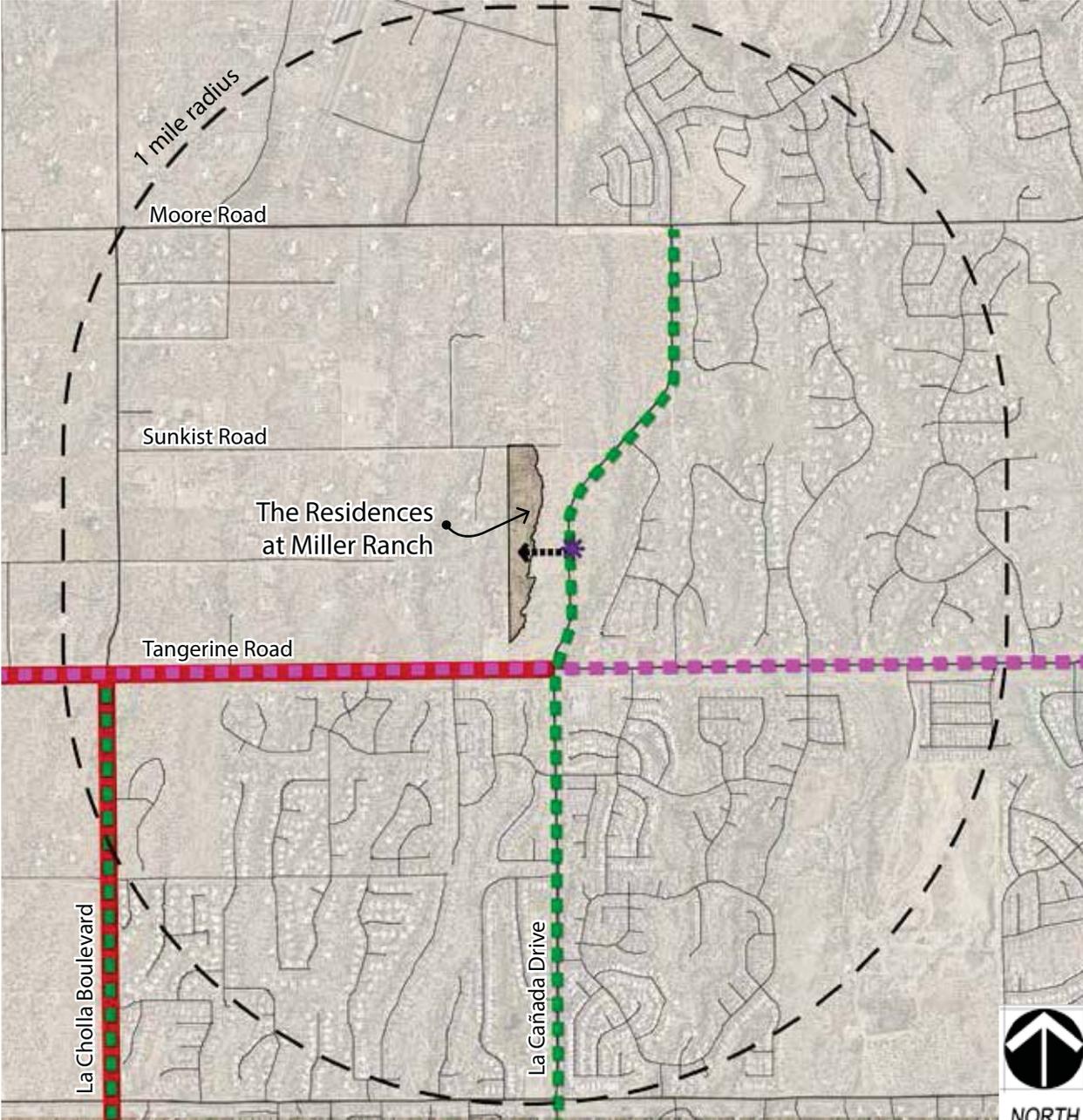
Source: Pima County GIS, The Residences At Miller Ranch Concept Plan, November 2014

LEGEND

 Full-Turn Intersection

# Inventory and Analysis

Exhibit 1-G.2a: Road Improvements and Arterials within 1 Mile Radius



Source: ADOT; Town of Oro Valley, July 2014

### LEGEND

- - - Scheduled Road Improvement
- - - Urban Principal Arterial Street
- - - Urban Minor Arterial Street
- ..... Site Access
- \* Full-Turn Intersection

### 3. Existing and Proposed Intersections on Arterials

There are three (3) median breaks located along the segment of La Cañada Drive that parallels the Miller Ranch site's eastern boundary. An existing full-turn intersection is located at the southern most median break, granting access to the site through the Technology Park & Retail Center via La Cañada Drive. There is currently no median along Tangerine Road west of La Cañada Drive with exception of along the left-hand turn lane at the intersection of the two roads. The intersection at La Cañada Drive and Tangerine Road is signalized.

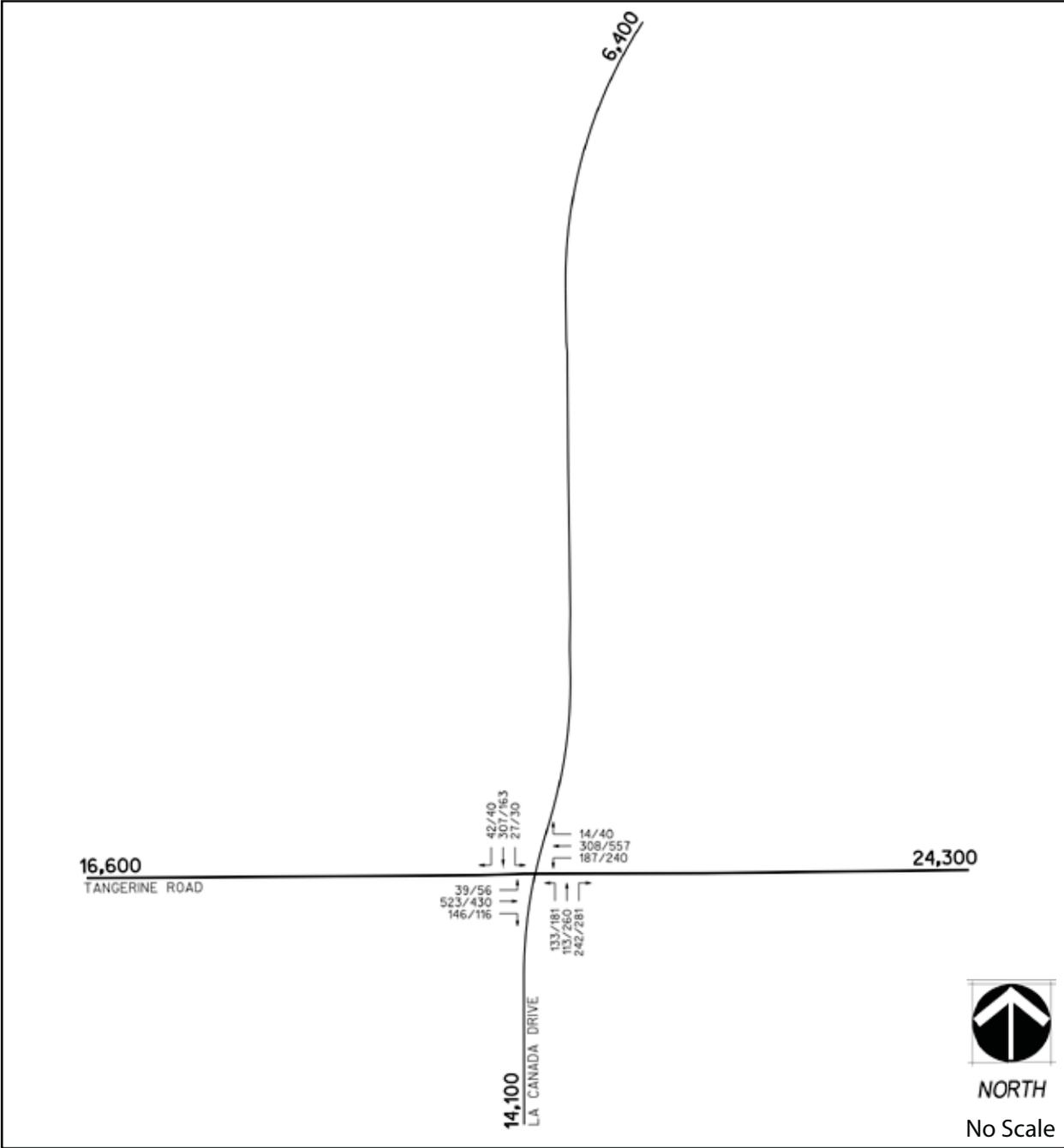
Existing arterial intersections within a mile of the site include Tangerine Road and La Cañada Drive to the east and Tangerine Road and La Cholla Boulevard to the west. Although Moore Road is classified as an Urban Collector as per the FHWA-approved Functional Classification Map (2009), this street's intersection with La Cañada north of the site, falls within a mile radius of the site.

### 4. Existing Bicycle and Pedestrian Ways

Hard surfaced shared-use paths supporting pedestrian and bicycle circulation and striped-shoulder bicycle routes follow road alignments, particularly along La Cañada Drive and Tangerine Road (east of La Cañada Drive). Bicycle and pedestrian ways are further detailed and mapped in *Section H. Recreation and Trails, pgs. 47- 48*.

Inventory and Analysis

Exhibit 1-G.2b: Existing Traffic Volumes



Source: Rick Engineering Company, August 2014

## H. Recreation and Trails

### 1. Description of Trails, Parks, and Recreation Areas within 1-mile of Site

Multiple trails, a portion of Naranja Townsite Park, and several golf courses lie within a one mile radius of the Residences at Miller Ranch site. *See Exhibit 1-H.1, Parks, Recreation, & Trails, p. 48.*

#### a. Trails:

All trails within one mile of the site are hard-surfaced, shared-use paths following major road alignments. Striped shoulder bicycle routes are also present along major road segments.

#### b. Naranja Townsite Park:

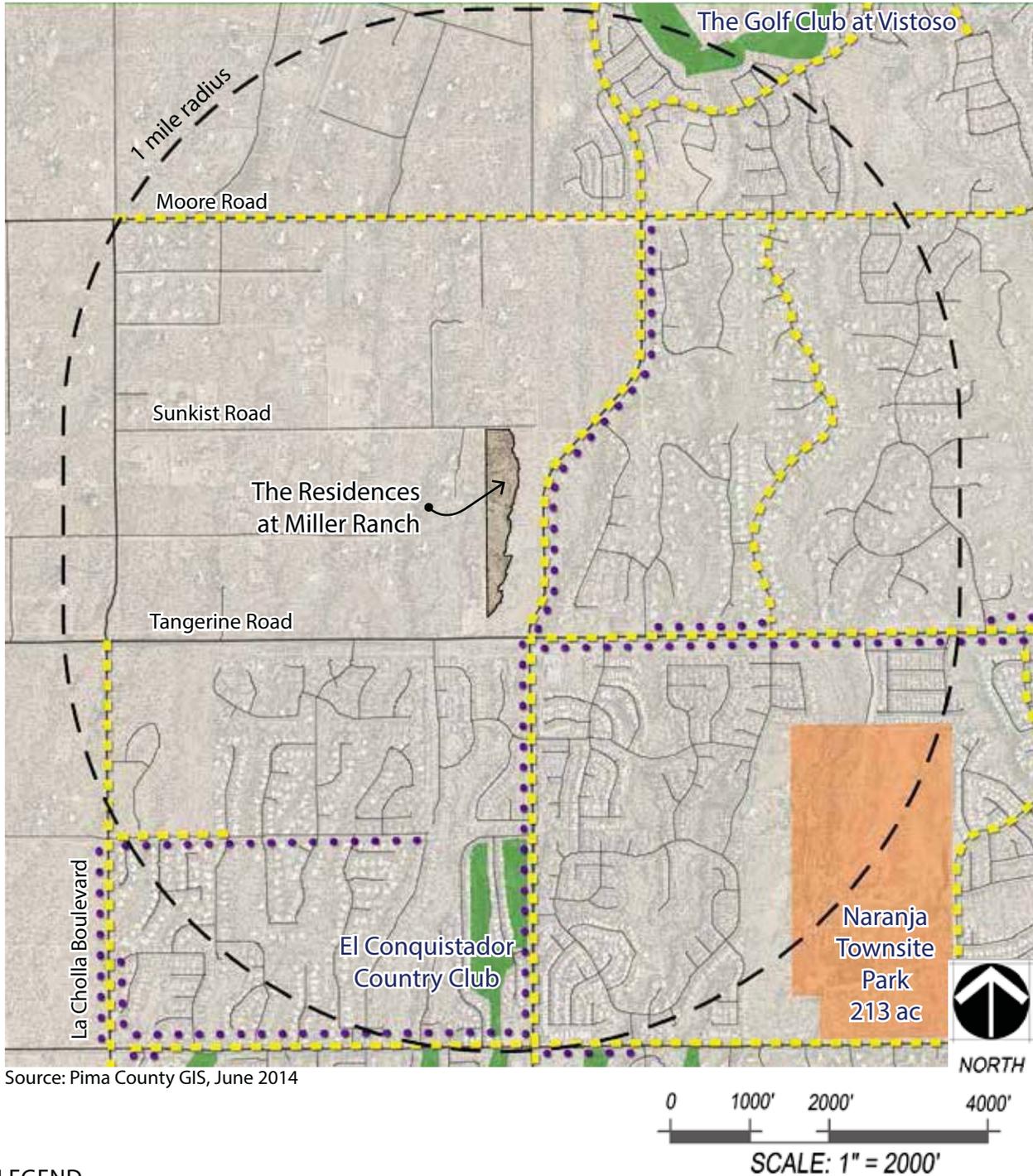
South of Tangerine Road and east of La Cañada Drive, the 213-acre Naranja Townsite Park features a network of trails and an archery course. As of June 2014, the park is currently under construction for Phase 1 Park Improvements which include two (2) multi-use sports field, a dog park, and parking lot.

#### c. Golf Courses:

There are two (2) golf courses located within one mile of the Residences at Miller Ranch site: The Golf Club at Vistoso north of Moore Road, and El Conquistador Country Club north of Naranja Drive and west of La Cañada Drive.

Inventory and Analysis

Exhibit 1-H.1: Parks, Recreation, & Trails



Source: Pima County GIS, June 2014

LEGEND

- Parks
- Golf Courses
- Shared-use Paths
- Striped Shoulder Bicycle Route

## I. Cultural/Archaeological/Historic Resources

### 1. Report of Available Site Information

*See Exhibit 1-I.1, Cultural Resources, p. 50, for a reliance letter from Fred Huntington, Director of Cultural Resources of Westland Resources, Inc. Engineering and Environmental Consultants. The letter states that upon completion of a cultural resources inventory survey in April, 2008 by Westland Resources, no prehistoric or historic period cultural resources were discovered within the project area. Westland recommends that no further cultural resources work be required due to the lack of archaeological and historic resources within the project site.*

## Inventory and Analysis

### Exhibit 1-I.1: Cultural Resources

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July 8, 2014

Mr. Stacey Weaks  
NORRIS DESIGN  
418 N Toole Avenue  
Tucson, AZ 85701

**RE: CULTURAL RESOURCES SURVEY REPORT FOR THE 37.2 ACRE MILLER RANCH  
PROPERTY AT LA CAÑADA DR AND TANGERINE ROAD, ORO VALLEY, ARIZONA  
WESTLAND PROJECT NO. 1544.01**

Dear Mr. Weaks,

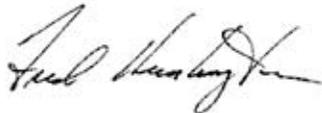
WestLand Resources Inc. (WestLand) completed a cultural resources inventory survey of the above referenced project in January of 2008. A draft report of the findings was submitted in April of 2008 and was forwarded for review to the State Historic Preservation Office (SHPO) by Shirley Gay of the Town of Oro Valley. SHPO comments on the report were received on September 8, 2008 and a revised cultural resources inventory report that included WestLand's responses to the SHPO comments was submitted on September 15, 2008.

No prehistoric or historic period cultural resources were discovered within the project area during the survey. Archival research indicated that the oldest building on the property was a stable built in 1972 and was, therefore, too young to be considered eligible for inclusion on the National Register of Historic Places (NRHP). In the six years since the original survey, this building has still not reached the minimum 50 year threshold to be considered eligible for the NRHP.

Due to the lack of archeological and historic period resources on the property, WestLand recommended that no further cultural resources work be required prior to the development of the property. The report met all applicable state and federal standards at the time it was written and can be relied upon to accurately reflect the lack of cultural resources on the property at the time of the survey. In addition, since no buildings on the property have reached the minimum 50 year threshold for listing on the NRHP, the recommendation that no cultural properties will be affected by the development of the project has not changed.

Should you have any questions or require additional information, please do not hesitate to call.

Respectfully,  
WestLand Resources, Inc.



Fred Huntington  
Director of Cultural Resources

cc: Jim Tress, WestLand Resources, Inc.

---

4001 E. Paradise Falls Drive • Tucson, AZ 85712 • 520•206•9585 Fax 520•206•9518  
2020 N. Central Avenue • Suite 695 • Phoenix, AZ 85004 • 602•888•7000 Fax 866•457•2838  
1750 S. Woodlands Village Blvd. • Suite 150 • Flagstaff, AZ 86001 • 928•225•2218 Fax 866•457•2838

## J. Schools

Located southeast and within a one mile radius of the Residences at Miller Ranch site, is Copper Creek Elementary School. *See Exhibit 1-J.1a, Schools within 1 Mile Radius, p. 52.* Accessible from Tangerine Road, the school is located off of N Copper Springs Trail and is a part of the Amphitheater Public School District.

Other schools not located within a one mile radius but could potentially serve the Residences at Miller Ranch are Painted Sky Elementary School, Wilson K-8 School, Ironwood Ridge Highschool, and Casas Christian School. *See Exhibit 1-J.1b, Schools Serving the Area, p. 53.*

## K. Water

Water Service Provider:  
Oro Valley Water Utility  
11000 N. La Cañada Drive  
Oro Valley, Arizona 85737

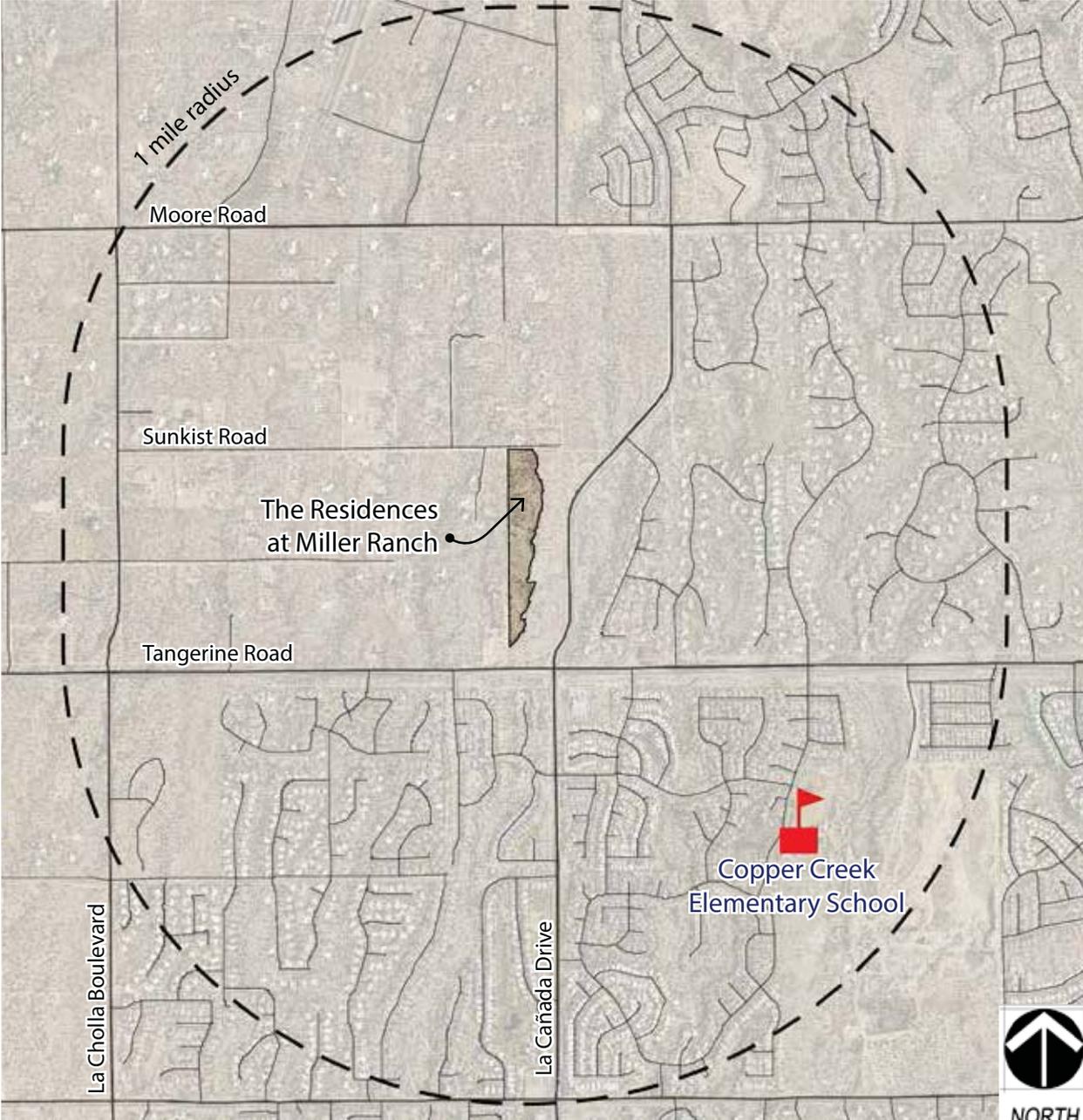
Philip C. Saletta, P.E., Water Utility Director  
Tel: 520-229-5000

## L. Sewer

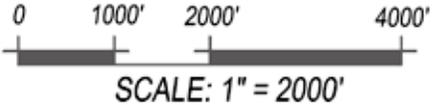
*Exhibit 1-L.1, Sanitary Sewer Pipes & Structures p. 54,* shows existing public sewer in relation to the project site. Sanitary sewer service will be extended from the 8" Public Sewer, P.N. G-2003-064, at Manhole Number 3890-09 located in the Tangerine Road right-of-way.

# Inventory and Analysis

Exhibit 1-J.1a: Schools within 1 Mile Radius



Source: Pima County GIS June 2014

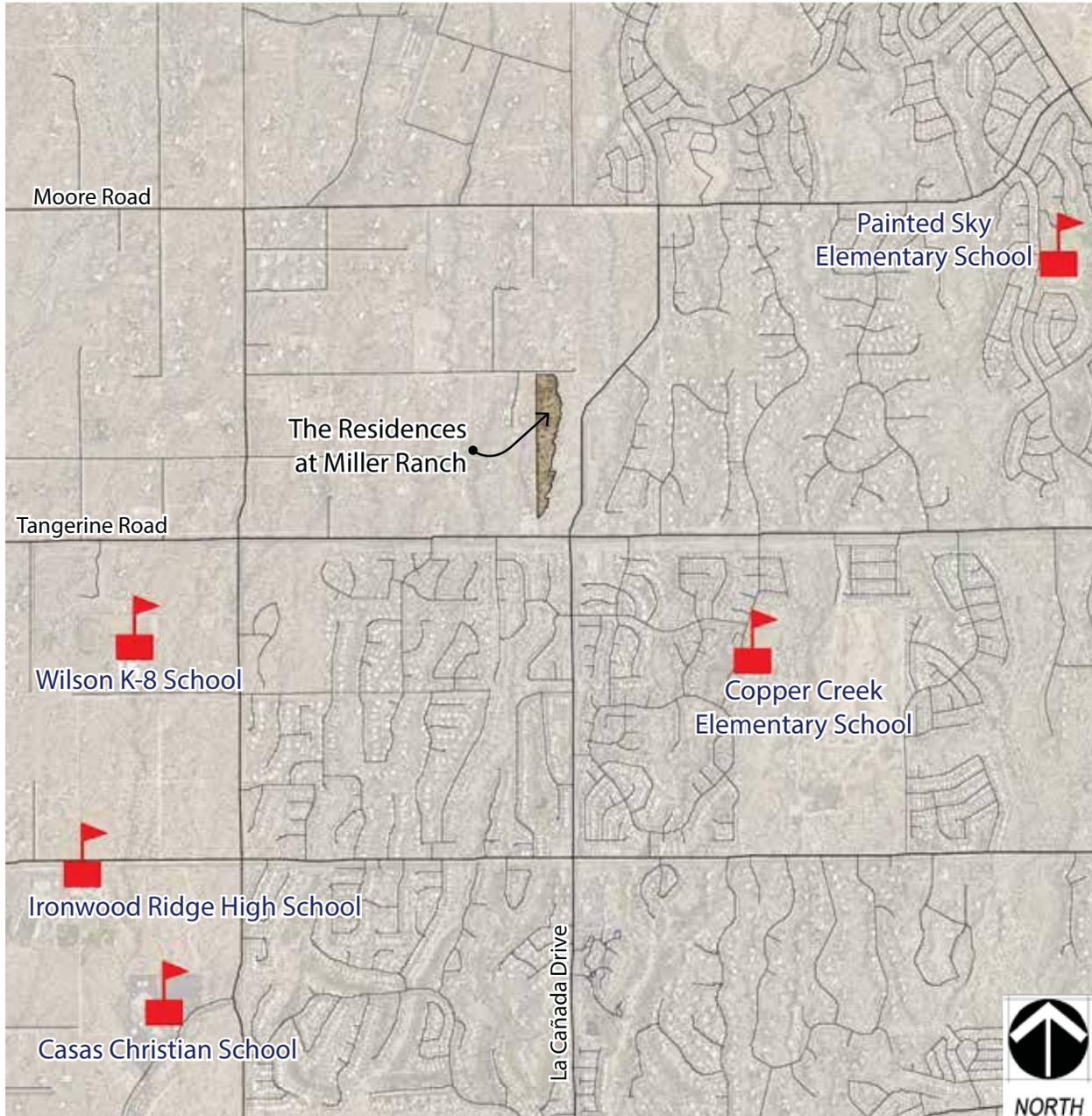


LEGEND

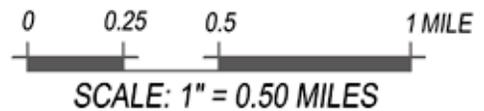
-  Schools

Inventory and Analysis

Exhibit 1-J.1b: Schools Serving the Area



Source: Pima County GIS, June 2014

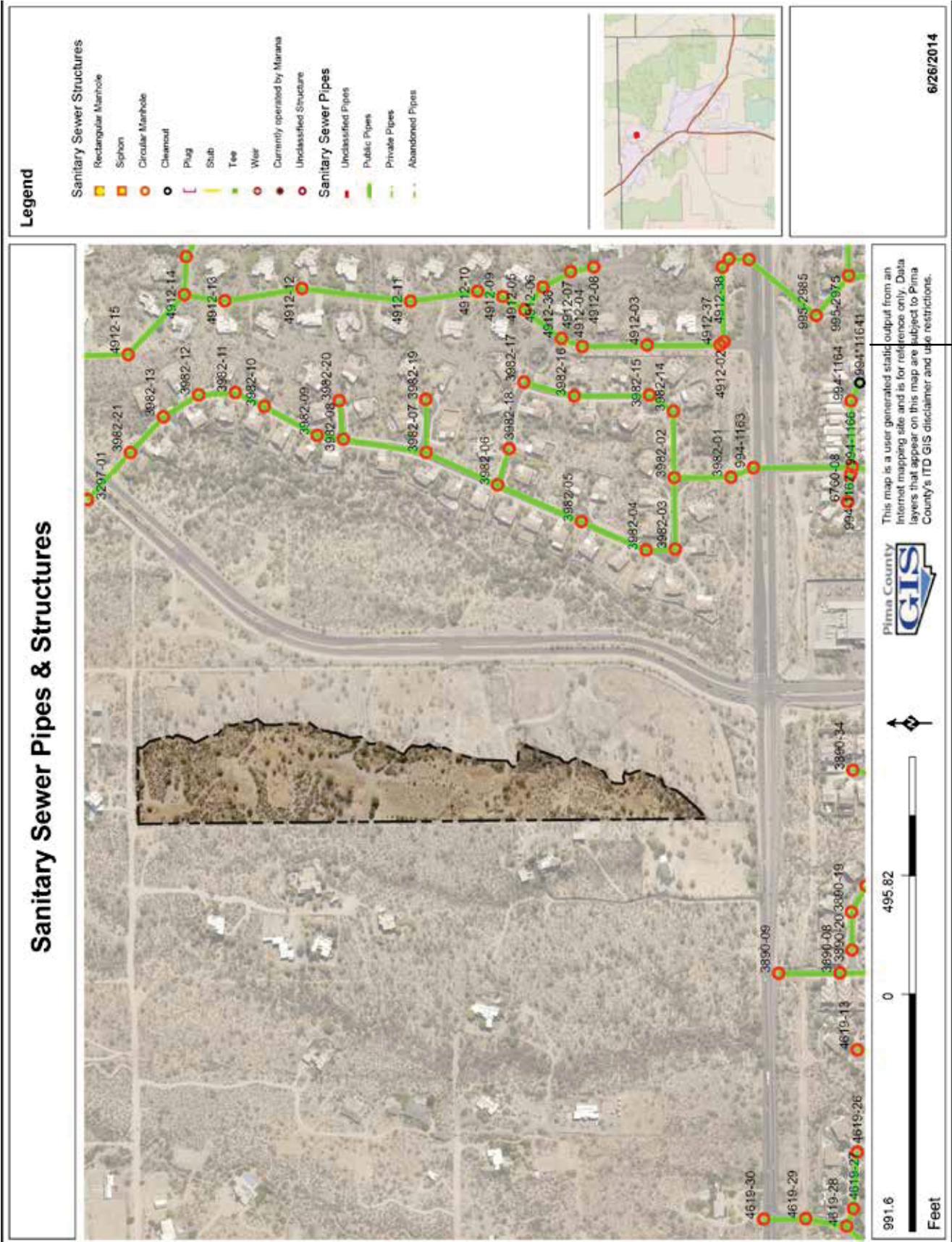


LEGEND

 Schools

Inventory and Analysis

Exhibit 1-L.1: Sanitary Sewer Pipes & Structures

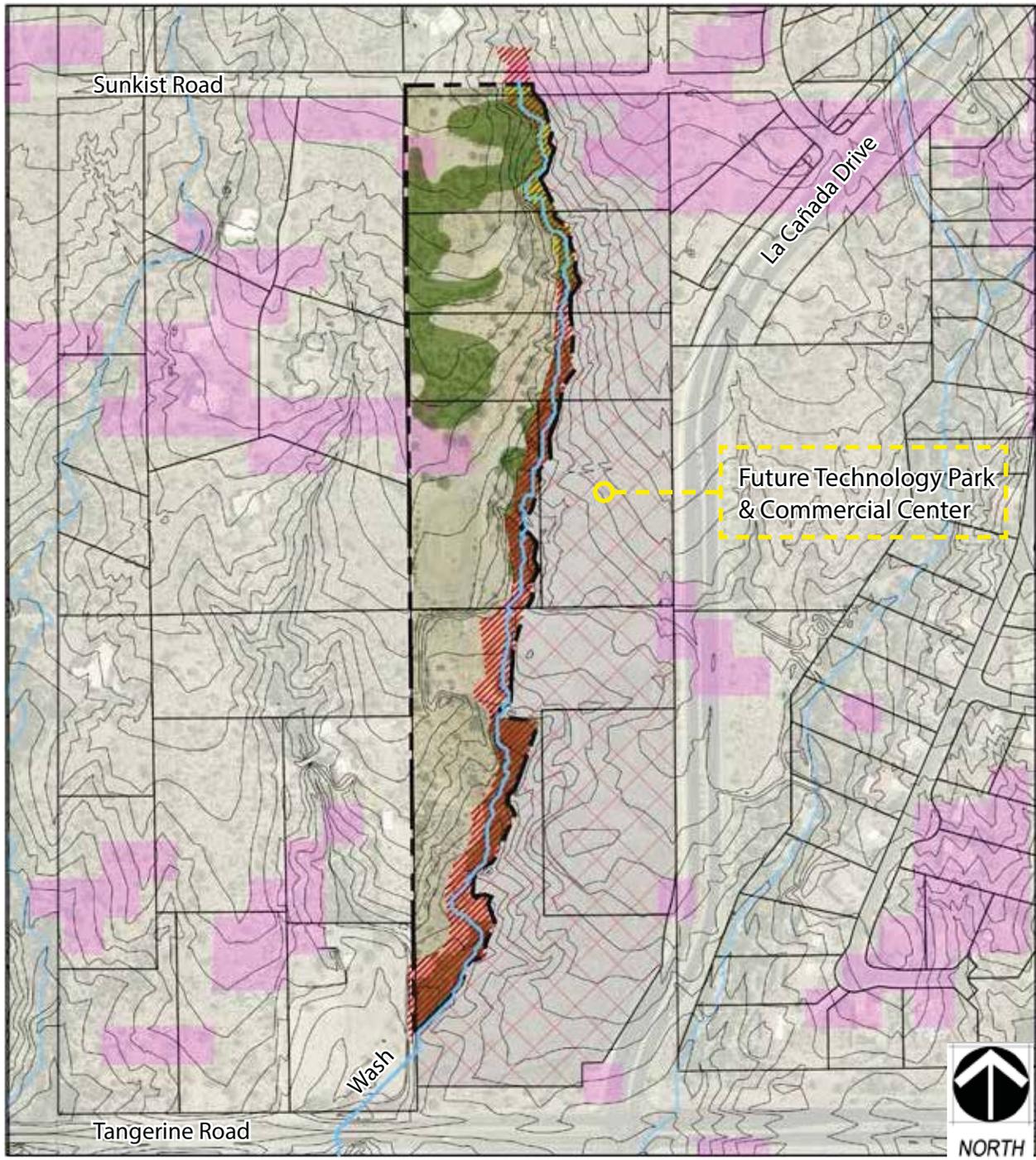


### M. Composite Map

A composite map showing Topography, Hydrology, Vegetation, and Wildlife is shown in *Exhibit 1-M.1, Composite Map, p. 56*. Viewsheds are not included in the composite map but are shown in *Exhibit 1-F.1 Views onto Site, p.37*, as most views onto the site are screened by vegetation and will not be significantly impacted.

Inventory and Analysis

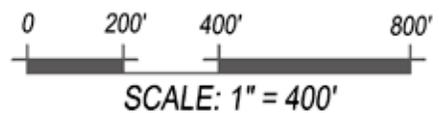
Exhibit 1-M.1: Composite Map



Source: Pima County GIS & Rick Engineering Company, July 2014;  
Site Observation, April 2014

LEGEND

- Medium-Low Vegetative Density (26% - 50%)
- Undisturbed Wash
- Lesser Long-nosed Bat High Value Habitat
- Contour Interval: 2'
- 100-year Flood Limits



## PART 2 - LAND USE PROPOSAL

### A. Project Overview

Miller Ranch is located at the northwest corner of Tangerine Road and La Cañada Drive. The eastern portion of Miller Ranch has an approved development plan integrating a Technology Park and Commercial Center. The Residences at Miller Ranch is planned to be a 16.3 acre residential development to complement the future Technology Park and Commercial Center. The existing land use designation is Medium Density Residential (MDR, 2.1 - 5.0 DU/AC), however through the General Plan Amendment process, the residential portion of Miller Ranch was stipulated to a maximum allowable density of 2.5 DU/AC. The Medium Density Residential classification aligns with the Low, Medium and High Density Residential designations of the existing residential parcels in the vicinity of the property. The Residences at Miller Ranch features twenty (20) lots with a minimum lot size of 10,000 square feet and ten (10) 12,500 square foot minimum lots, totaling thirty (30) residential lots with a gross density of 1.84 DU/AC. As part of the ESL requirements, the Critical Resource Area (CRA) requires a minimum of 95% preservation and the Resource Management Area requires 25% open space. Approximately 1.5 acres of open space serves to restore and protect the site's disturbed unnamed wash corridor, satisfying the ESL minimum requirement.

#### **Concept Plan | Open Space Summary**

The Residences at Miller Ranch provides a collection of open space comprised of ESL Critical Resource Area, ESL Resource Management Area, and revegetated common areas. Approximately 6.4 acres (39%) of the site will be open space, common areas and landscaped areas. The neighborhood will enhance the landscape areas along the property edges, create an attractive streetscape and blend the drainage systems into the site. Passive amenities will be integrated with drainage features into the neighborhood in conformance with the provisions per the ESL. In addition, a portion of the wash will be enhanced to become an amenity for the community. The project will include an at-grade, natural surface trail connection across the wash at the south end of the project to connect with the future trail on the Technology Park and Commercial Center campus. *See Exhibit 2-A, Miller Ranch Concept Plan, p. 60 and Table 2-A, ESL Open Space, p. 58, for a summary of the open space for Miller Ranch.*

TABLE 2-A ESL OPEN SPACE

## Land Use Proposal

ESL Open Space	Required	Provided
Critical Resource Area	3.3AC	3.4AC
Resource Management Area - Tier 2	3.2AC	1.6AC plus 1.5 AC Wash Restoration Area*
Common Area / Open Space	N/A	1.4 AC
Total Open Space	N/A	6.4AC (39%)

\* Wash Restoration Credit (1.5AC) to be applied to the Resource Management Area open space

### Rezoning Development Incentives

As part of our zoning request for a R1-7 district, we are requesting the following development incentives per Section 27.10 Environmentally Sensitive Lands (ESL) of the Oro Valley Zoning Code.

### Wash Restoration Credit

Request: We are requesting credit for the restoration of a majority of the existing unnamed wash within the residential development.

Overview: The entire property and wash have been significantly denuded over the years by the ranching activities on the site. As part of the development program, the project will enhance the disturbed portions of the existing wash including the removal of the invasive plants. Approximately two (2) acres of the wash will be enhanced to improve the function of the wash and overall aesthetic quality of this resource. A 1.5 acre credit will be applied towards the overall environmentally sensitive open space (ESOS) requirements and specifically applied to the Resource Management Area (RMA) open space requirement.

Code Reference: Town of Oro Valley Zoning Code, Chapter 27: General Development Standards, Section 27.10 Environmentally Sensitive Lands, (D) Environmentally Sensitive Lands Conservation Systems, (3) Conservation Categories, (b) Critical Resource Area (CRA) Category, (ii) Conservation (c,1), Page 278.8.

## Development Incentives

### **Modified Review Process**

Request: We are requesting to apply the Modified Review Process for the subsequent design and infrastructure plan submittals.

Overview: We anticipate the rezoning and public engagement process will address critical planning elements for the project. Thus, this will result in a refined plan that can subsequently be approved administratively. We understand if modifications were considered to be more than minor revisions, future submittals may not be able to be approved administratively.

Code Reference: Town of Oro Valley Zoning Code, Chapter 27: General Development Standards, Section 27.10 Environmentally Sensitive Lands, (F) ESOS Use and Conservation Development, (2) Development Balance and Incentives, (c, iii) Flexible Development, (h) Modified Review Process, Page 278.64.

## B. Tentative Development Plan

Provided under separate cover.

Land Use Proposal

Exhibit 2-A: Miller Ranch Concept Plan



Not to scale

### C. Existing Land Uses

1. Map of Zoning Boundaries and Existing Land Uses on Adjacent Properties

The Residences at Miller Ranch site (parcel numbers 219-47-017A, 018A, 0050, 0060, 004A, 004C, and 004B as identified by the Pima County Assessor) is currently zoned R1-144. Requested zoning for the site is R1-7. Current zoning of site and adjacent property is shown in *Exhibit 2-C.1, Zoning Boundaries/Land Uses, p. 62*. Section 1-A.3 contains additional information on existing zoning and land uses.

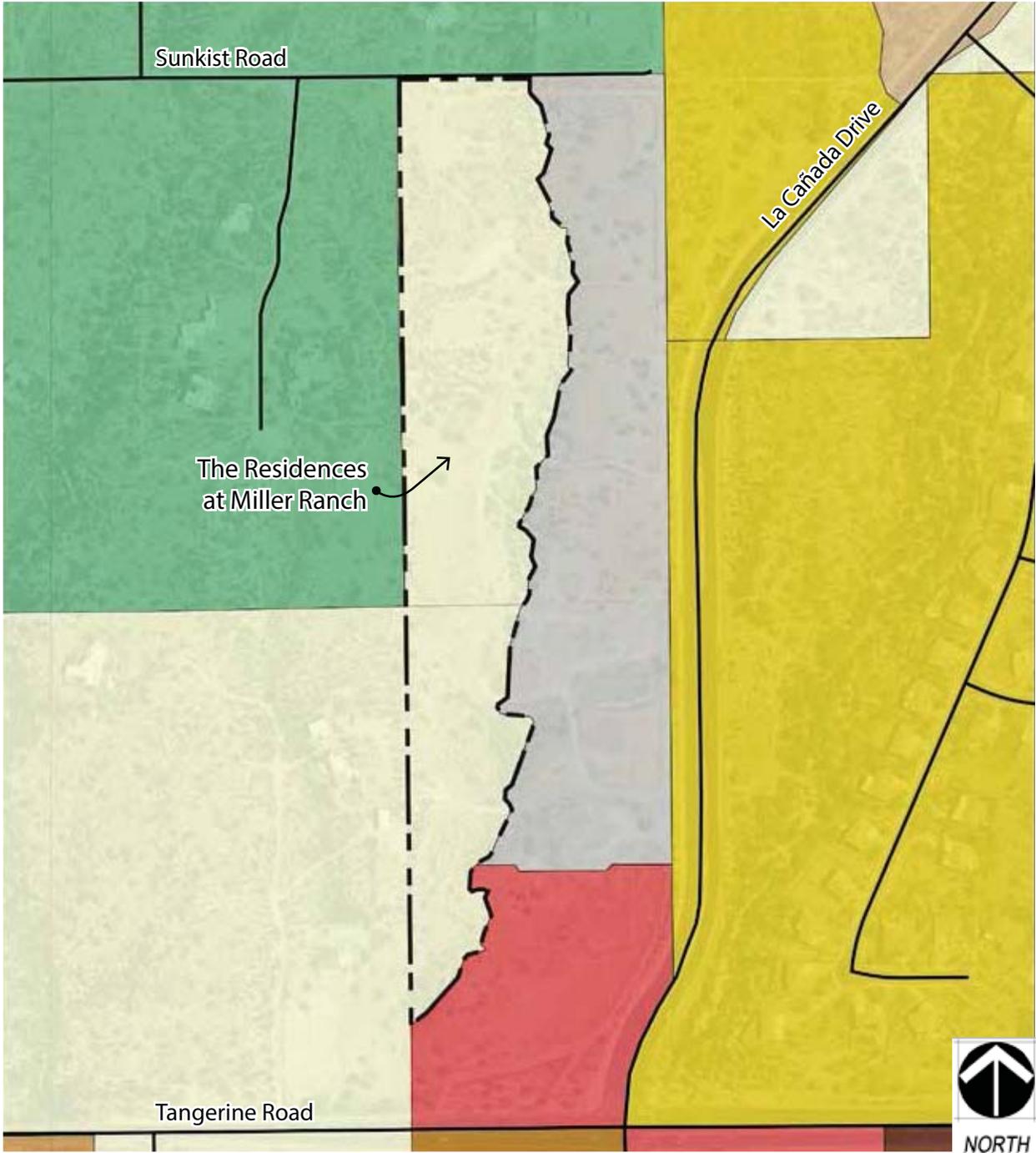
2. Effects of Proposed Development on Existing Land Uses

The Residences at Miller Ranch proposes a viable land use that is complementary to development patterns in the vicinity along the Tangerine Road and La Cañada Corridors. Currently undeveloped, the site is zoned for R1-144 Single Family Residential with a density of 0.3 DU/AC. The proposed rezoning requests rezoning the site to R1-7 Single Family Residential with a density of 1.84 DU/AC. The property was approved for a General Plan Amendment in February 2014 receiving a Medium Density Residential (MDR, 2.0 - 5.0 DU/AC) designation with a maximum allowable density of 2.5 DU/AC. As per the Oro Valley General Plan's definition for MDR, this use should be located adjacent to schools, shopping and employment. The project is adjacent to the future Miller Ranch Technology Park and Commercial Center which will eventually serve as a shopping and employment node along the Tangerine Corridor. The Residences at Miller Ranch may potentially provide housing for employees of nearby future employers.

Development at the lower end of the MDR density range also creates a compatible and logical transition between the existing residential land use to the west and the future Technology Park and Commercial Center. This transition is complemented by integrating enhanced vegetative buffers between the project and existing residential properties while minimizing impacts to distant ridgeline views.

Land Use Proposal

Exhibit 2-C.1: Zoning Boundaries/Land Uses



Source: Pima County GIS, June 2014

LEGEND

- SR: Suburban Ranch
- R1-144: Single Family Residential
- R1-36: Single Family Residential
- R1-20: Single Family Residential
- R1-10: Single Family Residential
- R1-7: Single Family Residential
- R-6: Multi-Family Residential
- C-1: Commercial District
- T-P: Technological Park

## D. Effects of Proposed Development on Topography

### 1. Response of TDP to Site's Topographic Characteristics

The existing topography slopes gently from the site's northwestern corner south and east towards the unnamed wash along the eastern site boundary. In effort to minimize site disturbance and preserve the wash along the eastern boundary, the site plan minimizes the grading by matching existing grades, where possible, on the northern and western portions of the subject property.

### 2. Encroachment onto Slopes of 15% or Greater

There is no encroachment onto slopes of 15% or greater.

### 3. New Average Cross-slope

The new post-development cross-slope is 6.2% based on the graded area of 10.8AC.

### 4. Area Used in Cross-Slope Calculations

The cross-slope calculations are based on the graded area of 10.8AC.

### 5. Areas to be Disturbed, Graded, and/or Revegetated

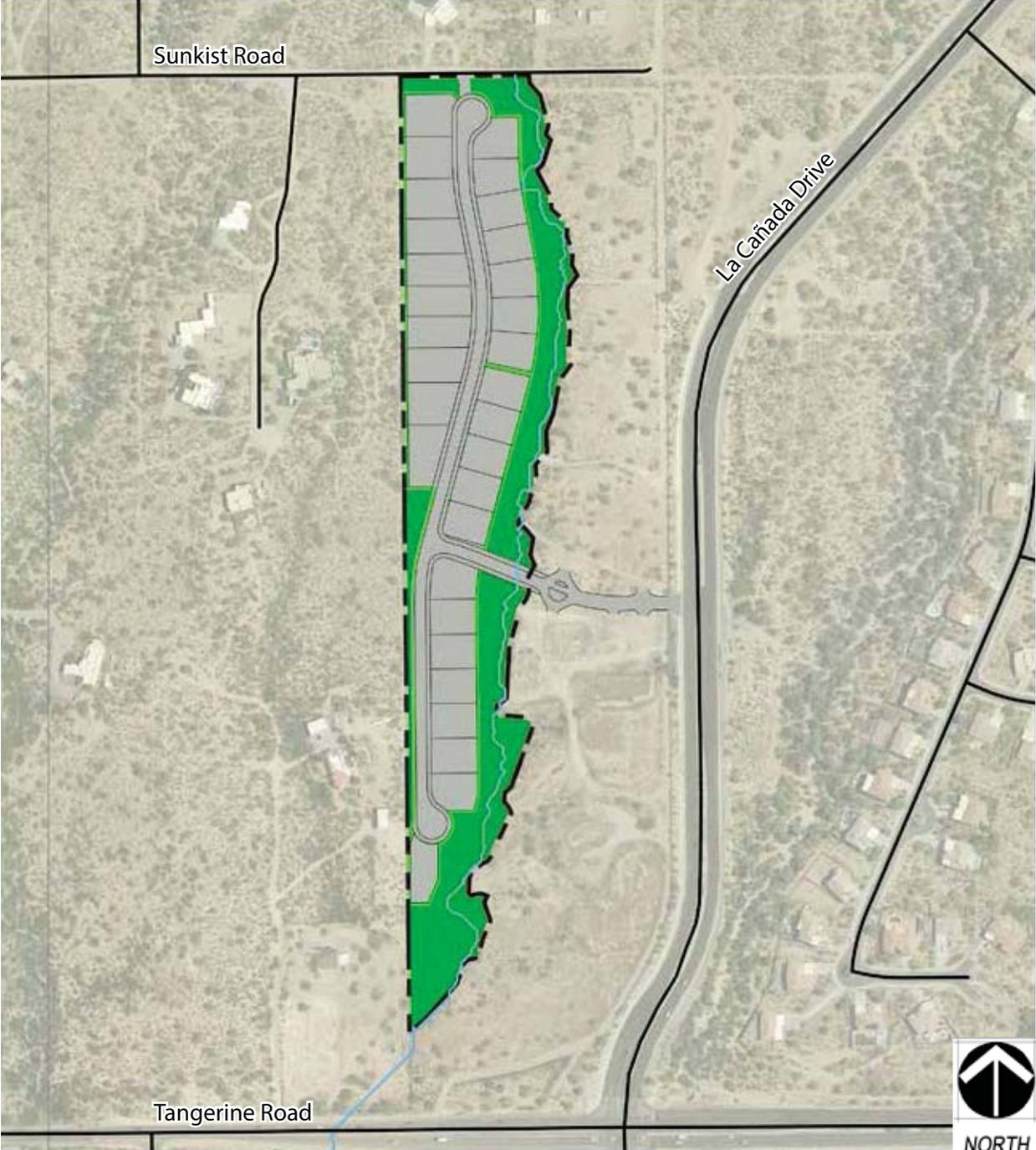
The extent of grading on the site is shown in *Exhibit 2-D.5, Areas to be Disturbed/Graded/Revegetated p. 64*. 10.8AC (66%) of the site will be disturbed/graded and 1.6AC (approx. 10%) of the site will be revegetated. In addition, 2.0AC of the wash will be restored and portions of the ESL open space will be enhanced to mitigate for the existing disturbed conditions, including the eradication of invasive species.

### 6. Map Extent of Grading on Site

Grading on-site is limited to lots and roadways. Refer to *Exhibit 2-D.5, Areas to be Disturbed/Graded/Revegetated p. 64*.

Land Use Proposal

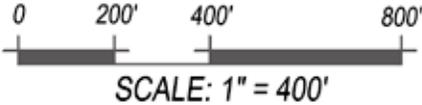
Exhibit 2-D.5: Areas to be Disturbed/Graded/Revegetated



Source: Concept Plan, November 2014

LEGEND

-  Developable Area 9.9AC (61% of total site)
-  Revegetated Area 1.6AC
-  Open Space 6.4AC (39% of total site)



## E. Effects of Proposed Development on Hydrology

### 1. Response of TDP to Site's Hydrological Characteristics

The proposed development area limits are based on the location of the existing unnamed wash along the east project boundary and associated floodplain limits. Proposed uses and drainage improvements are intended to be compatible with this existing wash and impact the wash as little as practicable. The project will accept the existing off-site runoff and discharge on-site flows at an attenuated level in accordance with Town of Oro Valley Drainage Criteria Manual (2010 edition).

Note that the approved Master Development Plan for Miller Ranch (OV12-08-07) associated with the proposed commercial development along the easterly boundary of this project incorporates detention basins to meet Town of Oro Valley detention design criteria. These proposed detention basins provide adequate attenuation to offset the increased runoff due to this proposed project and detention basins will not be required within The Residences at Miller Ranch (this project) as currently designed. See *Exhibit II.E.1: Post-Development Hydrology p. 69* for the preliminary drainage plan for the overall Miller Ranch site including The Residences at Miller Ranch and the future commercial center. Refer to *Exhibit II.E.2: Post-Development Hydrology – Interim Condition, p. 71* for the preliminary drainage plan for the overall Miller Ranch site in the interim condition assuming The Residences at Miller Ranch is constructed before any phase of the commercial center.

### 2. Encroachment/Modification of Drainage Patterns

Proposed development intends to modify existing drainage patterns as little as practicable. The majority of the developed site will discharge to the unnamed wash along the project boundary, which is similar to existing conditions. Proposed drainage improvements along the wash include a roadway crossing and slope protection with cut-off wall at the toe of slope along the back of pads where proposed lot grading encroaches within the erosion hazard setback. The roadway crossing will incorporate culverts sized to ensure all-weather access, prevent adverse impacts to upstream properties, and minimize the impact to the hydraulic characteristics of the wash. Erosion protection will be provided upstream and downstream of this crossing.

To facilitate the construction of building pads along the west project boundary grading will be required that will reduce the flows to adjacent properties. The existing discharge from On-site Watershed 5E is 14 cfs and it is anticipated this will be reduced to 2 cfs. This reduction will not adversely impact adjacent properties and is not anticipated to have a significant impact on downstream flows sustaining riparian areas.

## Land Use Proposal

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### 3. Potential Drainage Impacts to Off-site Land Uses Upstream and Downstream

This project is bounded along its northerly upstream boundary by low density residential developments. Improvements along the north boundary will be designed to accept existing off-site flows and will ensure the adequate conveyance of these flows. This will prevent drainage impacts to land uses of upstream properties.

The existing wash along The Residences at Miller Ranch project east boundary is not proposed for significant modifications beyond one roadway crossing and slope protection at isolated locations along the west edge. In the interim, prior to the construction of the Miller Ranch commercial development, off-site flows from the east will be accepted in a manner similar to existing conditions (except where detention basins are constructed as described below).

Drainage improvements for this project will include the construction of detention basins to attenuate runoff from the developed site and ensure there no adverse impacts to downstream properties. Detention basins will be designed to ensure the post-development peak discharge from the project matches the existing condition or is reduced by no greater than 10%, in compliance with the Town of Oro Valley Drainage Criteria Manual (2010 edition).

### 4. Engineering/Design Features to Mitigate Drainage and Erosion Problems

As described previously, there are off-site flows from the north and east that impact the project. The nature and quantity of these flows will be further evaluated in the drainage report(s) prepared for the development of the site. The necessary improvements to convey the flows will be determined at that time and will be incorporated into the drainage improvements for the development. In general, the existing unnamed wash along the east project boundary will remain undisturbed and will be enhanced by the wash restoration program. The use of stabilized side slopes and cut-off walls at the toe of slope will be incorporated where improvements encroach within the existing erosion hazard setback. See *Exhibit II.E.1: Post-Development Hydrology p. 69* for the preliminary drainage plan for the overall Miller Ranch site including The Residences at Miller Ranch and the future commercial center.

Detention is required to ensure the post-development peak discharge from the project matches the existing condition or is reduced by no greater than 10%, in compliance with the Town of Oro Valley Drainage Criteria Manual (2010 edition). The design and construction of the proposed basin system will be in accordance with the requirements of the Pima County Stormwater Detention/Retention Manual, and any modifications adopted by the Town of Oro Valley.

Detention to offset the increased runoff resulting from the development of The Residences at Miller Ranch project will be provided within the overall Miller Ranch

property, within the commercial portion of the site on the east side of the unnamed wash. The approved commercial site layout associated with the Master Development Plan for Miller Ranch (OV12-08-07) and analyzed by the Master Drainage Report for Miller Ranch (Rick Engineering Company, dated May 19, 2010) includes eight detention basins. These proposed detention basins on the commercial side of the Miller Ranch site provide adequate detention to offset the increased runoff from both the commercial center and The Residences at Miller Ranch and ensure that Town of Oro Valley detention criteria is satisfied at the downstream boundary of the overall Miller Ranch site. The details of this detention system design will be provided in the drainage report(s) prepared for the development of the site. As discussed above, no detention is required or proposed within The Residences at Miller Ranch and all detention will be provided within the commercial portion of the Miller Ranch site.

In an interim condition, if The Residences at Miller Ranch is constructed prior to the commercial portion of the site, the proposed detention basins associated with the commercial center can be constructed to meet the Town of Oro Valley detention requirements for The Residences. Assuming none of the commercial center has been constructed, construction of Detention Basin 3 in conjunction with The Residences at Miller Ranch will be adequate to mitigate the effects of increased runoff from the residential project. Refer to Exhibit II.E.2: Post-Development Hydrology – Interim Condition for a preliminary hydrologic analysis of this interim condition of the overall Miller Ranch site. The phased construction of the detention basins will be further evaluated in the drainage report(s) prepared for the development of the site.

Proposed residential lots along the existing wash will be rear-draining and will drain directly to the wash. The remaining lots will drain to the proposed roadway. The roadway will convey runoff to scuppers and/or catch basins that convey flows to the wash. Streets will be designed in accordance with Town of Oro Valley street drainage criteria by ensuring runoff is contained within the curbing and does not exceed 50 cfs.

Appropriate erosion protection and energy dissipation will be provided at basin inlet and outlet structures, at storm drain, culvert, and channel outlets, and as necessary at other concentrated flows.

One wash crossing will be required for the primary entry road off La Canada Drive. This crossing will provide all-weather access by conveyance of the unnamed wash below the roadway by an appropriately sized culvert structure. The crossing will not adversely impact upstream properties and will be designed to maintain wash sediment transport stability as much as practicable. A preliminary analysis indicates that 5-48" RCP or 2-6'x3' RCBC culvert structures will be acceptable. The detailed design of this culvert structure, including a backwater analysis, will be included in the future drainage report for the project.

## Land Use Proposal

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First flush treatment is not required for residential projects within the Town of Oro Valley. If first flush treatment is provided it will be at scuppers and catch basins where runoff drains from paved surfaces. If utilized, treatment BMPs will be sized for the 2-year, 1-hour storm in accordance with Town of Oro Valley Drainage Criteria Manual (2010 edition), section 11.7.2.

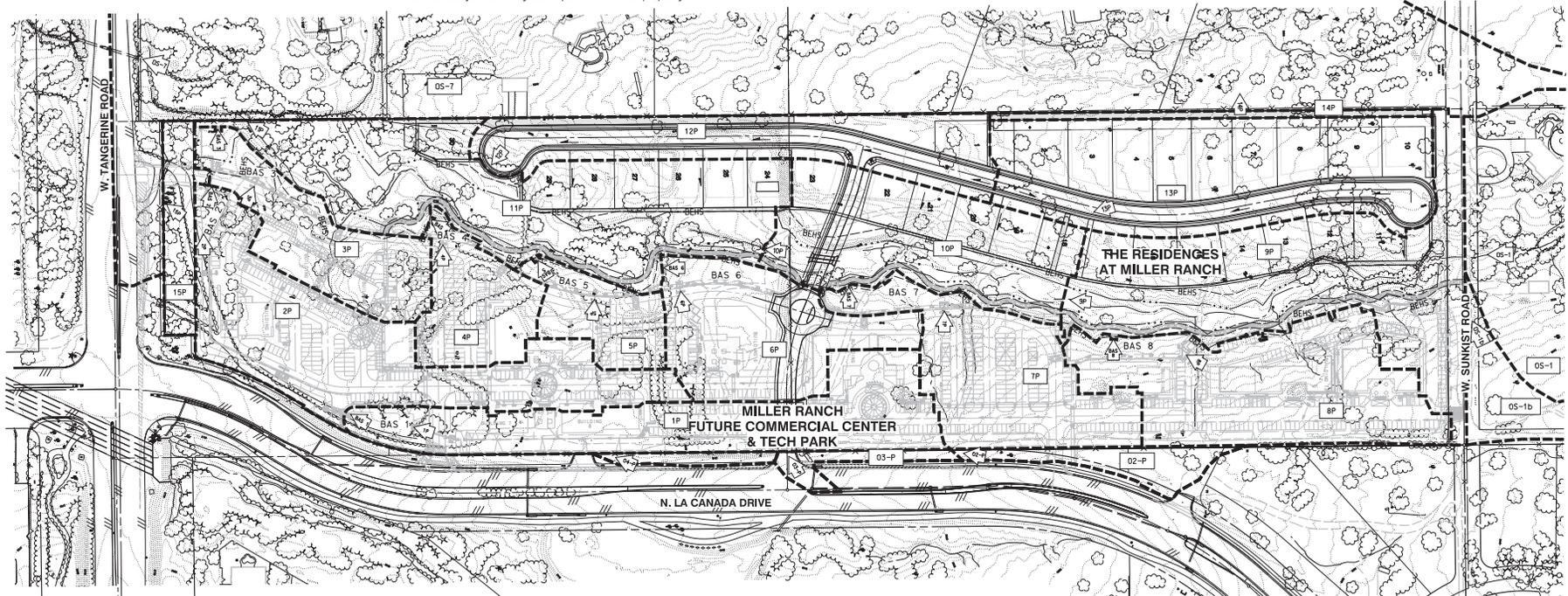
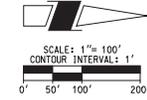
5. **Conformance of TDP to Area Plans, Basin Management Plans, and Town Policies**  
The project will conform with applicable policies related to drainage and floodplain management. Applicable policies include but are not limited to those contained within the Town of Oro Valley Drainage Criteria Manual (2010 edition) and the Pima County Stormwater Detention/Retention Manual. Development will include the following to comply with applicable policies:
- Detention will be provided and demonstrated as adequate through hydrologic modeling
  - The existing unnamed wash will remain mostly undisturbed

PROPOSED PEAK FLOWS					
WATERSHED	AREA	Q100	CUMULATIVE	CUMULATIVE	CUMULATIVE
CP's	(ac)	(cfs)	CP's	AREA (ac)	Q100 (cfs)
1P	2.9	26		2.9	26
CP 1P	-	-	O2 + O3 + O4 + 1P	3.8	35*
BAS 1	-	-	CP 1P - BAS 1	-	17*
2P	3.7	37		3.7	37
BAS 2	-	-	BAS 1 + 2P - BAS 2	-	19*
3P	1.7	17		1.7	17
BAS 3	-	-	BAS 2 + 3P - BAS 3	-	21*
4P	1.2	12		1.2	12
BAS 4	-	-	4P - BAS 4	-	1*
5P	0.9	9		0.9	9
BAS 5	-	-	5P - BAS 5	-	2*
6P	2.2	22		2.2	22
BAS 6	-	-	6P - BAS 6	-	3**
7P	2.4	24		2.4	24
BAS 7	-	-	CP 7P - BAS 7	-	3**
8P	3.2	32		3.2	32
BAS 8	-	-	8P - BAS 8	-	7*
9P	4.2	33	9P + BAS 8 + O5-1	-	153*
10P	2.9	22	10P + BAS 7 + CP 9P	-	153*
11P	4.2	29	11P + 12P + BAS 3 + BAS 4 + BAS 5 + BAS 6 + CP 10P	-	239**
12P	2.5	21		2.5	21
13P	4.2	35		4.2	35
14P	0.3	2		0.3	2
15P	0.8	6		0.8	6

\* Per HEC-HMS analysis of fully developed Miller Ranch property

OFFSITE PEAK FLOWS			
WATERSHED	AREA	Q100	CUMULATIVE
CP's	(ac)	(cfs)	Q100 (cfs)
O5-1	22.7	133	-
O5-2	1.4	11	-
O5-3	4.2	31	-
O5-4	3.6	27	-
O5-5	5.0	37	-
O5-6	5.6	42	-
O5-7	31.4	184	422*

\* Per T.O.M. Proj. No. 2005-061 "Tangerine Road-Thornydale Road to La Canada Dr."



**LEGEND**

- 1 WATERSHED
- 1 CONCENTRATION POINT
- BAS 1 PROPOSED DETENTION BASIN
- WATERSHED BOUNDARY
- BEHS BUILDING EROSION HAZARD SETBACK
- REGULATORY 100-YEAR FLOOD LIMITS (PROPOSED)

**NOTES:**

1. DETENTION STORAGE TO OFFSET INCREASED RUNOFF FROM THE MILLER RANCH RESIDENTIAL PROJECT WILL BE PROVIDED BY THE COMMERCIAL PROJECT. FUTURE COMMERCIAL CENTER AND TECH PARK IS SHOWN FOR REFERENCE ONLY, AND IS NOT A PART OF THIS PROJECT.
2. REFER TO EXHIBIT ILE.2 FOR THE INTERIM DRAINAGE CONDITION, IF THE RESIDENTIAL PROJECT IS CONSTRUCTED PRIOR TO ANY PHASE OF THE COMMERCIAL CENTER AND TECH PARK.

**EXHIBIT ILE.1**  
 POST-DEVELOPMENT HYDROLOGY  
**THE RESIDENCES AT MILLER RANCH**

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 11 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN, TOWN OF GIRD VALLEY, PIMA COUNTY, ARIZONA.

OV 114-020 DATE: 04/16/2015 SHEET 1 OF 1

**RICK**  
 ENGINEERING COMPANY

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 TUCSON, AZ 85712  
 520.795.1000  
 FAX: 520.322.6956  
 rick.com

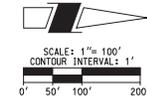
J-5668-C

WATERSHED	AREA	PROPOSED PEAK FLOWS			
		0100	CUMULATIVE	CUMULATIVE	
CP's	[ac]	[cfs]	CP's	AREA [ac]	0100 [cfs]
3P-INT	3.2	23	-	3.2	23
BAS 3-INT	-	-	3P - BAS 3	-	6*
9P-INT	7.7	58	9P-INT + OS-1	30.4	171*
10P-INT	6.1	46	10P-INT + 9P-INT + 13P + OS-1	36.5	219*
11P-INT	12.0	82	11P-INT - BAS 3 + 9P-INT + 10P-INT + 12P + 13P + OS-1	-	279*
12P	2.5	21	-	2.5	21
13P	4.2	35	-	4.2	35
14P	0.3	2	-	0.3	2

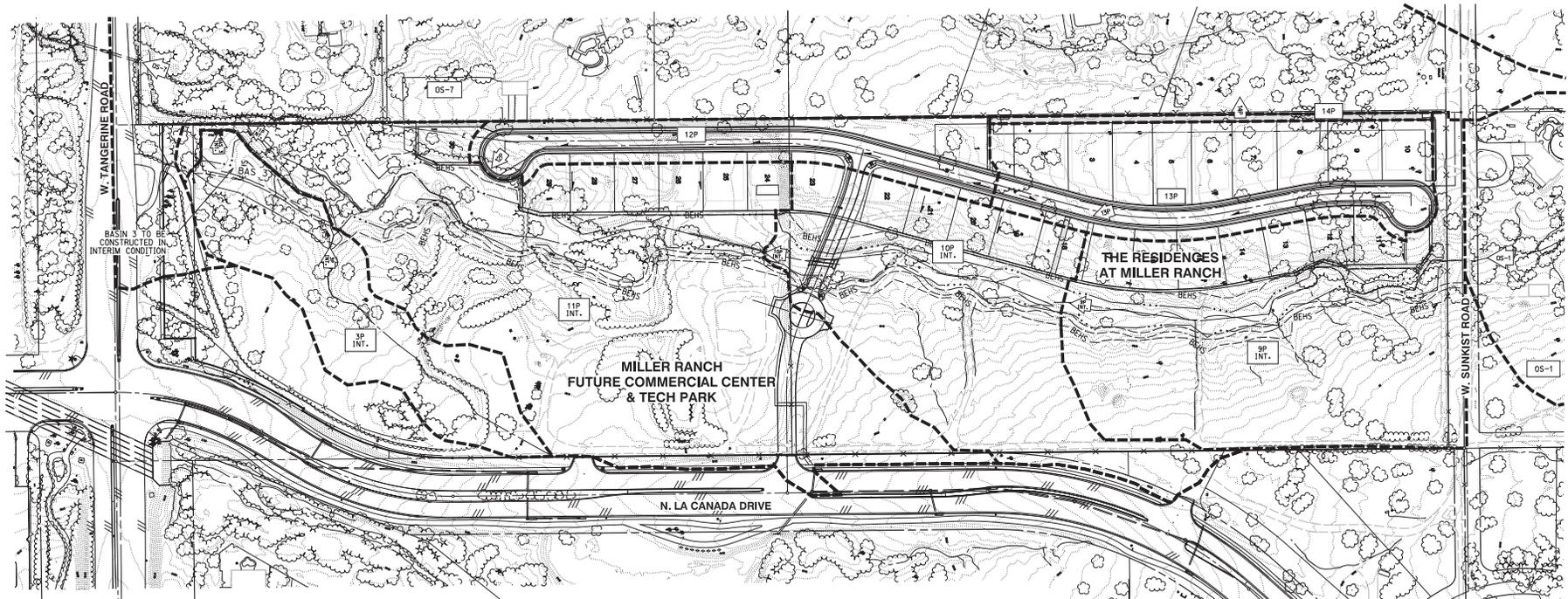
\* Per HEC-HMS analysis of Interim condition (no commercial)

WATERSHED	AREA	OFFSITE PEAK FLOWS	
		0100	CUMULATIVE
CP's	[ac]	[cfs]	0100 [cfs]
OS-1	22.7	133	-
OS-2	31.4	184	422*

\* Per T.O.M. Proj. No. 2005-061 "Tangerine Road-Thornlydale Road to La Canada Dr."



BASIN	DETENTION/RETENTION BASIN SUMMARY - INTERIM CONDITION							
	0100 IN [cfs]	0100 OUT [cfs]	V100 [cfs]	WEIR BASIN TOP [ft]	BASIN BOTTOM [ft]	WEIR LENGTH [ft]		
BAS 3-INT	23	6	0.36	2792.8	2794	2790.8	2792.6	10



**LEGEND**

- WATERSHED
- CONCENTRATION POINT
- BAS 1 PROPOSED DETENTION BASIN
- WATERSHED BOUNDARY
- BEHS BUILDING EROSION HAZARD SETBACK
- REGULATORY 100-YEAR FLOOD LIMITS (PROPOSED)

**NOTES:**

1. IN THE INTERIM CONDITION, DETENTION STORAGE TO OFFSET INCREASED RUNOFF FROM THE MILLER RANCH RESIDENTIAL PROJECT WILL BE PROVIDED BY THE CONSTRUCTION OF THE BASIN 3 OF THE COMMERCIAL PROJECT.

**EXHIBIT ILE.2**  
 POST-DEVELOPMENT HYDROLOGY - INTERIM CONDITION  
**THE RESIDENCES AT MILLER RANCH**

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 11 SOUTH, RANGE 13 EAST, GILA & SALT RIVER MERIDIAN, TOWN OF GIRD VALLEY, PIMA COUNTY, ARIZONA.

OV 114-020 DATE: 04/16/2015 SHEET 1 OF 1

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 520.795.1000  
 FAX: 520.322.6956  
 J-3668-C  
 www.rickengineering.com

## F. Vegetation

### 1. TDP Response to Vegetative Characteristics Described in Part 1

The Residences at Miller Ranch site is sporadically vegetated and contains minimal areas of Significant Vegetation, as defined under Oro Valley Zoning Code, Section 27.6. Building envelopes and roadways have been sited to minimize vegetative disturbance and will not affect designated Significant Vegetation. A saguaro cactus (*Carnegiea gigantea*) located near the site's southwestern corner meets criteria established within the Oro Valley Zoning Code; the saguaro will be preserved-in-place as it is located within the rear setback outside the building envelope. Native vegetation within the undisturbed, northern portion of the unnamed wash is also considered significant and will not be negatively impacted by the development of the site. The project will follow mitigation requirements outlined in section 27.6.B of the Oro Valley Zoning Code as needed.

Please refer to the Site Resource Inventory (SRI) and Native Plant Preservation Plan (NPPP), under separate cover, for additional information regarding significant vegetation and mitigation.

### 2. Discussion of Vegetation to be Transplanted

Vegetation will be preserved in place where possible to minimize disturbance. Transplantability of vegetation will be determined per Oro Valley Zoning Code, Section 27.6.B. All trees, shrubs, and cacti that meet the salvage and transplantability criteria will either be preserved in place or relocated on-site. Please refer to the Native Plant Preservation Plan, under separate cover, for additional information regarding disposition of native plants.

## G. Wildlife

Destruction of wildlife habitat within the developable area is anticipated to be very minimal. The Biological Evaluation completed by WestLand Resources, Inc., Engineering and Environmental Consultants, provided under separate cover, does not identify any Critical Habitat within the site's boundaries. Pima County Geographic Information Systems recognizes areas of High Value Habitat on-site for the endangered Lesser Long-nosed Bat (*Leptonycteris curasoae yerbabuena*), however due to the species' ability to forage over long distances and the abundance of suitable forage resources throughout the Tucson Basin, it was concluded that no foreseeable adverse impacts are likely to result from the implementation of this project. The development will revitalize wildlife habitat by integrating enhanced vegetative buffers and restoring 2.0 acres of the site's disturbed wash corridor, enhancing riparian habitat for migratory birds and other wildlife.

*See Section 1-E.1, Wildlife, p. 24.*

## Land Use Proposal

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### H. Buffer Plan

#### 1. Map of Buffer Areas, Mitigation Techniques

Buffer yard requirements are based on adjacent property zoning. *Table 2-H.1, Required Buffer Yards, p. 75* shows the required buffer yards for the Residences at Miller Ranch site. Landscape buffer yards will be used on the west and north boundaries of the site as shown in *Exhibit 2-H.1 Buffer Areas, p. 76*. No landscape buffer is required along the east property border as it is adjacent to T-P and C-1 zoning (per Town of Oro Valley Planning, no buffer yards or building setbacks are required between commercial properties). However, the unnamed wash corridor creates a natural vegetative buffer between the east property boundary and the proposed Technology Park and Commercial Center. The Residences at Miller Ranch lacks a definitive southern boundary and the area south of the site is undeveloped land zoned C-1. Directly north of the site is Sunkist Road, defining the north border and separating R1-7 and SR zones. The developer of the Residences at Miller Ranch is prepared to integrate landscaping enhancements to the northern edge of the Residences to mitigate potential impacts to the northern property.

*Sound.* Due to the proximity of the Residences at Miller Ranch to arterial roads and the future Technology Park and Commercial Center, mitigation of sound is highly desirable and will be achieved through the use of sound filtering mechanisms such as vegetated buffers and five (5) foot property walls.

*Visibility.* As a private residential community, screening from arterial roads and adjacent land uses is desired. This will be accomplished by integrating densely vegetated buffers along the site's boundaries. Each lot will also include a five (5) foot property wall for additional privacy.

*Outdoor Lighting.* Per the Town of Oro Valley Zoning Code, Section 27.5 Outdoor Lighting, the Residences at Miller Ranch is designated as a E2a Lighting Zone and will meet all minimum requirements established for that zone.

*Traffic.* It is anticipated that traffic generated by the proposed development will be nominal due to the limited number of residential lots and the site's proximate location to two (2) arterial roadways. Access to the Residences at Miller Ranch is provided by a local access road off La Cañada Drive, an arterial street with capacity to support estimated traffic flows. The proposed development will not significantly or negatively impact existing traffic conditions in the immediate area.

#### 2. Cross-Section Illustrations—Treatments Adjacent to Existing Development/Streets *See Exhibit 2-H.2: Cross-Section Illustrations, p. 77*

TABLE 2-H.1: REQUIRED BUFFER YARDS

The Residences at Miller Ranch Boundary	Adjacent Property Zoning <sup>1</sup>	Provided Buffer		Required Buffer <sup>2</sup>	
		Width	Plants per Linear 100'	Minimum Width	Plants per Linear 100'
West	R1-144, SR	14'	5 Trees, 5 Shrubs, 10 Accents min.	10'	4 Trees, 5 Shrubs, 10 Accents
North	Street, SR	25'*	5 Trees, 5 Shrubs, 10 Accents min.	15'	N/A
East	T-P, C-1	Varies		0'	N/A

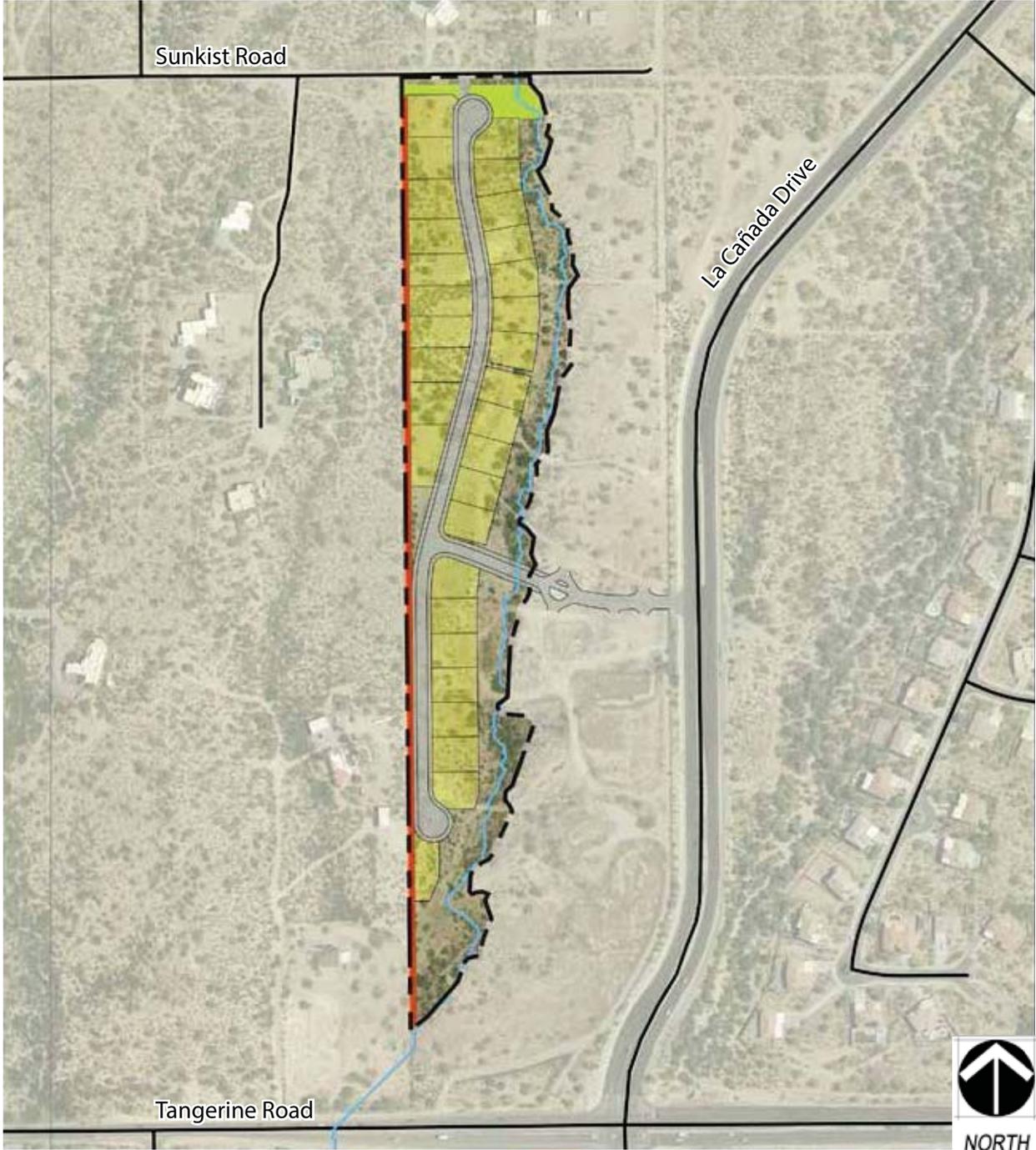
<sup>1</sup> Pima County GIS, June 2014

<sup>2</sup> Oro Valley Zoning Code, June 2014, Section 27.6

\* North buffer is a minimum of 50' from the existing southern edge of Sunkist Road.

Land Use Proposal

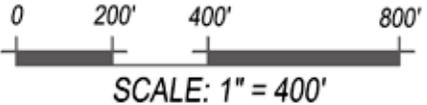
Exhibit 2-H.1: Buffer Areas

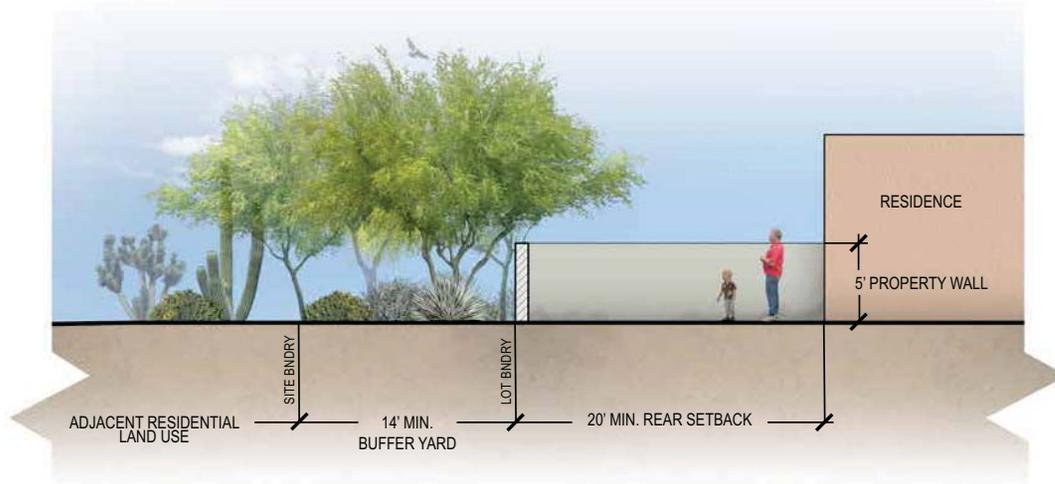


Source: Concept Plan, November 2014

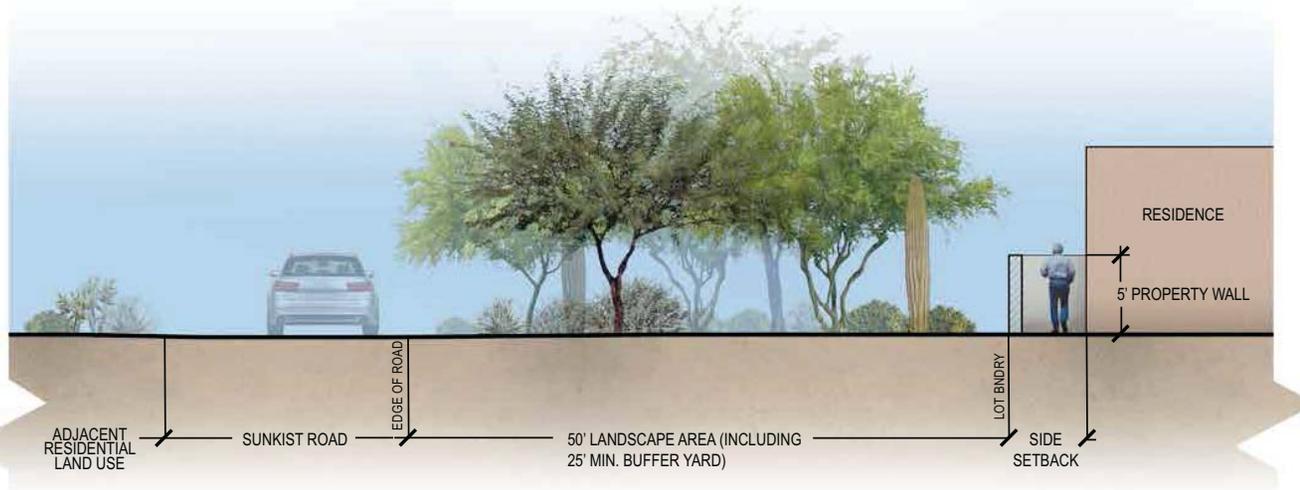
LEGEND

-  Minimum 14' buffer yard
-  Minimum 25' buffer yard  
(Minimum of 50' from the existing southern edge of Sunkist Road)



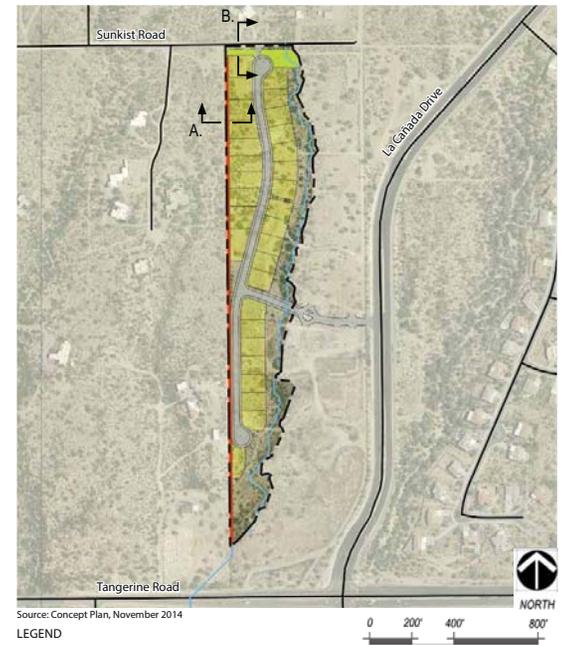


A.) WESTERN SITE BOUNDARY SECTION (N.T.S.)



B.) NORTHERN SITE BOUNDARY SECTION (N.T.S.)

Buffer Yard Plan with Section Cuts



Source: Concept Plan, November 2014

LEGEND

- Minimum 14' buffer yard
- Minimum 25' buffer yard  
(Minimum of 50' from the existing southern edge of Sunki)



## I. Viewsheds

### 1. Viewshed Mitigation

#### a. Views and vistas from off-site

The proposed development will not negatively impact current views onto the site or desirable distant vistas across the site, *see Exhibit 1-F.3, Visual Impacts of Proposed Structures, p. 39*. Buffers designed for the western and northern site boundaries will be enhanced with vegetation and property walls to buffer the proposed homes from the existing, adjacent residential properties. These buffers will mitigate the views on-site of proposed homes, however will not negatively impact distant mountain views for neighboring residents. The existing riparian corridor on the eastern boundary will create a natural, lush, vegetative buffer, providing screening between the proposed homes and the Technology Park and Commercial Center.

#### b. Areas of high visibility

Currently, views onto the site are predominantly filtered by vegetation. Implementing vegetated buffers along the site's western and northern boundaries, as well as the natural buffer created by the riparian corridor will mitigate views onto the site.

### 2. Roadway Construction

The Residences at Miller Ranch has been designed in such a way to minimize grading and site disturbances as much as possible. The roadway configuration works with the natural terrain, requires one (1) wash crossing, and does not provide through access to Tangerine Road to the south or Sunkist Road to the north. The roadway on-site will be a public, local roadway with access off La Canada Drive. Roadway improvements will conform to the requirements per the Town of Oro Valley Subdivision Street Standards.

## J. Traffic

### 1. Traffic Report

A final Traffic Impact Analysis for The Residences at Miller Ranch will be provided with the Tentative Development Package for administrative review.

### 2. On-site Street Rights-of-Way

The Residences at Miller Ranch will include one proposed internal street, a public north-south oriented local residential roadway, accessible from La Cañada Drive. The proposed local roadway is a paved 28' undivided cross section with a 50' right-of-way. Cul-de-sacs are located at the north and south ends of the roadway with emergency access provided to Sunkist Road. For cross-sections of the residential roadway refer to sheet 9 of *Exhibit 2-B, Tentative Development Plan, under separate cover*.

## Land Use Proposal

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### 3. Proposed Bicycle and Pedestrian Pathways

The Residences at Miller Ranch will incorporate a four (4) foot wide, detached, concrete sidewalk where residential lots front the local, internal road. Additional pedestrian pathways will be included, where appropriate, to provide access to the proposed riparian corridor trail as part of the neighboring Technology Park and Commercial Center.

## K. Sewer

### 1. Method for Providing Sewer Service

Public sewer service for the proposed residential subdivision will be extended from the 8" Public Sewer, P.N. G-2003-064, at Manhole Number 3890-09 located in the Tangerine Road right-of-way. See *Exhibit 2-K.1a: Method for Providing Sewer Service, p. 81*. Pima County Regional Wastewater Reclamation Department (RWRD) confirmed the request for public sewer service on August 11, 2014. Request logged as 2014-200. See *Exhibit 2-K.1b: Sewerage Capacity Investigation Request, p. 82*.

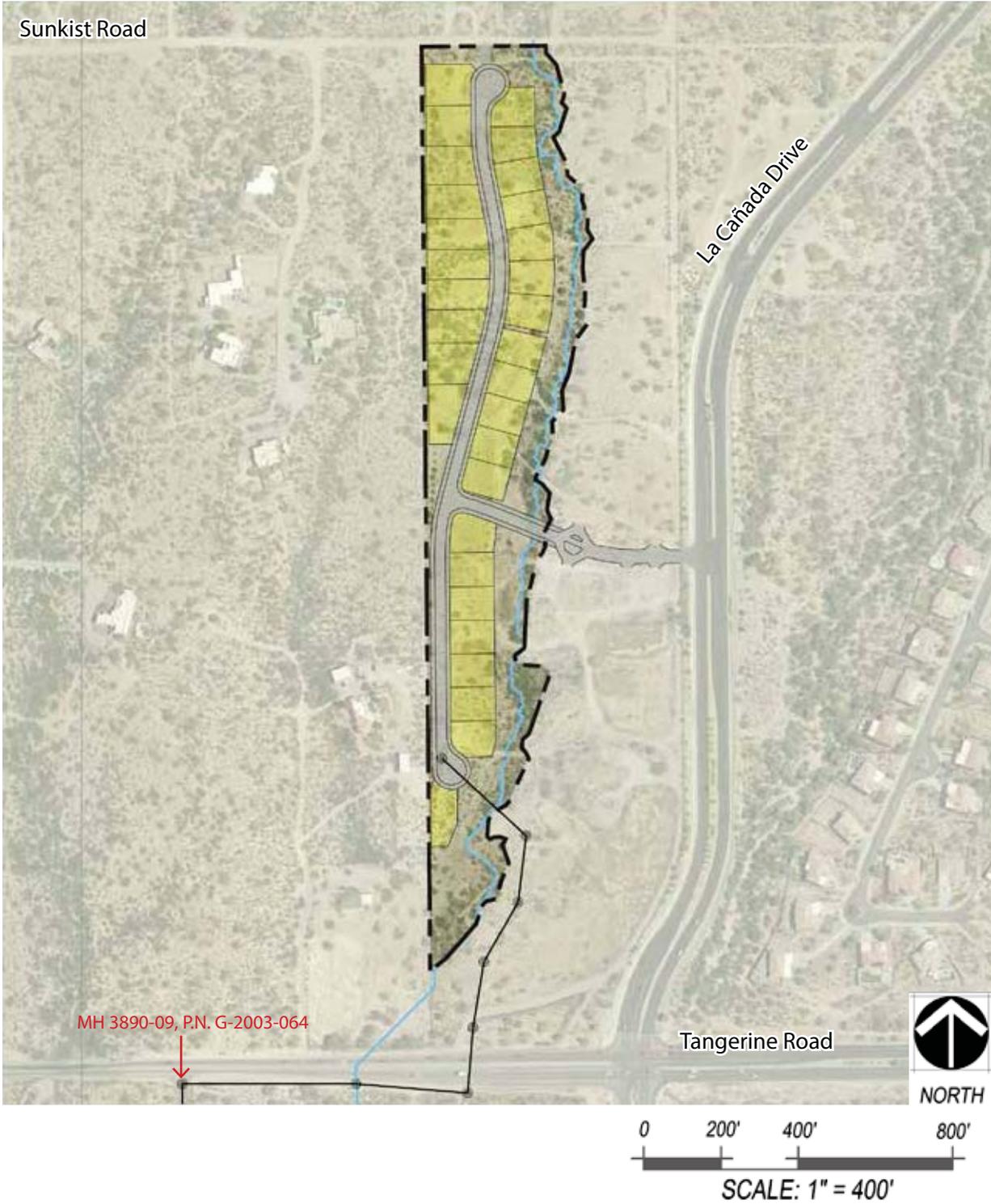
## L. Recreation and Trails

A map of trails, parks, and recreation areas is shown in *Exhibit 1-H.1, Parks, Recreation, & Trails, p. 48*. To facilitate access to existing recreational features, The Residences at Miller Ranch will connect to striped bicycle lanes and shared use paths on La Cañada Drive. A four (4) foot wide concrete sidewalk is proposed along the frontage of all homes located within the project and a pedestrian linkage will be located at the south end of the property to connect with the Technology Park and Commercial Center's proposed trail within the riparian corridor. Recreational amenities on-site include passive recreational elements such as a ramada, seating, horseshoes and bocce ball courts.

## M. Cultural Resources

Upon completion of a cultural resources inventory survey in April, 2008 by Westland Resources, no prehistoric or historic period cultural resources were discovered within the project area. See *Exhibit 1-I.1, Cultural Resources, p. 50*, for a reliance letter from Fred Huntington, Director of Cultural Resources of Westland Resources, Inc. Engineering and Environmental Consultants.

Exhibit 2-K.1a: Method for Providing Sewer Service



Land Use Proposal

Exhibit 2-K.1b: Sewerage Capacity Investigation Request



201 N Stone Ave., 3rd Floor	Tucson, Arizona 85701	(520) 724-6642
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**TYPE I - SEWERAGE CAPACITY INVESTIGATION REQUEST**

A Type I - Capacity investigation is a general determination issued to satisfy the submittal requirements for new Rezoning and Site Analysis.

Completed requests must be transmitted electronically to: [RWRDCapacityResponse@pima.gov](mailto:RWRDCapacityResponse@pima.gov)

DOCUMENTATION THAT MUST BE SUBMITTED WITH THE REQUEST:	
SUBMITTED	NOT APPLICABLE
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

**8 1/2" x 11" Location Map** - Requests without location maps cannot be processed.  
All Calculations used to determine Flow Volumes.  
If capacity availability has been previously prepared for this property, please provide the previous response #.

PROJECT NAME AND LOCATION	
Project Name: MILLER RANCH - RESIDENTIAL SUBDIVISION	
Township: 11 S, Range: 13 E, Section: 34	Total No. of Acres: 16.3
Assessor's Parcel Numbers for all parcels for which sewer service is requested: 219-47-004A, 004B, 004C, 0050, 0050, 017A & 018A.	

PROJECTED AVERAGE DRY WEATHER FLOW (ADWF) - FROM SEWER DESIGN REPORT	
Number of proposed residential lots/units: 38 x 216-gpd per lot or unit	8,208 gpd
Non-Residential - Attach Calculations using <a href="http://www.deq.pima.gov/water/PDF/R15-9_Table_1.pdf">http://www.deq.pima.gov/water/PDF/R15-9_Table_1.pdf</a>	gpd
<b>Total ADWF =</b>	<b>8,208 gpd</b>

PROPOSED POINT OF CONNECTION TO THE PUBLIC SEWER SYSTEM	
Please use the Sanitary Sewers layers of Map Guide ( <a href="http://gic.pima.gov/maps/RWRDC">http://gic.pima.gov/maps/RWRDC</a> ) to identify where the project will connect to the public sewer system, using the construction plan numbers and IMS manhole numbers. If the proposed connection will be to a public sewer line that has not yet been built, please identify the proposed point of connection as shown on the approved construction plans.	
To Public Sewer Line #: G-2003-064	<input checked="" type="checkbox"/> Existing OR <input type="checkbox"/> Proposed
<input checked="" type="checkbox"/> At public sewer manhole: IMS# 3850-09	OR <input type="checkbox"/> Between manholes: IMS MH# and IMS MH#
<input type="checkbox"/> Via a connection to a private sewer that discharges to the point described above. Please provide the details of such a connection in an attachment.	

CONTACT INFORMATION	
Contact's Name:	TRI MILLER
Name of Contact's Firm:	RICK ENGINEERING COMPANY INC.
Mailing Address for Firm:	Street: 3045 EAST FORT LOWELL ROAD, SUITE 111
	City: TUCSON State: AZ Zip-Code: 85712
E-Mail Address:	tmiller@rickengineering.com
Phone #:	+1 (520) 795-1000
Fax #:	+1 (520) 322-0856

## N. Schools

See *Exhibit 2-N.1, Letter from Amphitheater Public Schools, p. 84*, for anticipated impacts the Residences at Miller Ranch will have on nearby schools including the number of elementary, junior and senior high school students that will likely be generated from the proposed development and current capacities.

## O. Water

### 1. Additional Domestic Water Demand

See *Exhibit 2-O.1, Letter from Oro Valley Water Utility p. 86*, for a reliance letter from Oro Valley Water Utility addressing additional domestic water demand.

### 2. Water Service Capacity

See *Exhibit 2-O.1, Letter from Oro Valley Water Utility p. 86*, for reliance letter from Oro Valley Water Utility addressing water service capacity.

Land Use Proposal

Exhibit 2-N.1: Letter from Amphitheater Public Schools



**OFFICE OF LEGAL COUNSEL**

Todd A. Jaeger, J.D.  
Associate to the Superintendent  
(520) 696-5156  
FAX (520) 696-5074

701 W. Wetmore Road • Tucson, AZ 85705 • TDD (520) 696-5055

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August 5, 2014

Jennifer Scott  
Senior Associate  
NORRIS DESIGN  
4450 N 12<sup>th</sup> St, Ste 236  
Phoenix AZ 85014

**RE: The Residences at Miller Ranch**

Dear Ms. Scott:

I am responding to your request for information regarding the capacity of Amphitheater schools impacted by your proposed development.

Using 2000 demographic multipliers developed by the U.S. Department of Census, Bureau of Census, and adjusted for Amphitheater District's school organizational patterns, we project the following student populations to result from this project when built:

<u>Academic Level</u>	<u>38 Single Family Homes</u>
Elementary	8
Middle	8
High School	5

The census multipliers we use to obtain these projections are 0.2075 elementary students per household, 0.2197 middle school students per household and 0.1282 high school students per household.

As you may know, our schools are currently enrolling students for this school year. Therefore, the capacity noted below is based on our last confirmed enrollment calculations. The schools which would be impacted by this population are listed below, along with the physical capacity available at each school *presently*. Please note that these schools will also be impacted by other developments in this area which may have already been approved by the Council but which are not yet built.

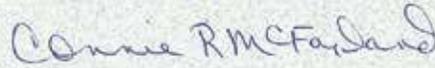
Amphitheater High • Canyon del Oro High • Ironwood Ridge High  
Amphitheater Middle School • Coronado K-8 School • Cross Middle School • La Cima Middle School • Wilson K-8 School  
Copper Creek Elementary • Donaldson Elementary • Harelson Elementary • Hojaway Elementary • Keeling Elementary  
Mesa Verde Elementary • Nash Elementary • Painted Sky Elementary • Prince Elementary • Rio Vista Elementary • Walker Elementary  
Rillito Center • El Hozar

Page 2  
August 5, 2014

<u>School Name</u>	<u>School Capacity</u>	<u>Spaces Currently Available</u>
Wilson K-5 (Elementary)	750	116
Wilson 6-8 (Middle)	800	189
Ironwood Ridge High	2290	402

If I can provide any additional information, please feel free to contact me.

Sincerely,



Connie R. McFarland  
Legal Assistant to Todd A. Jaeger, J.D.

## Land Use Proposal

## Exhibit 2-O.1: Letter from Oro Valley Water Utility



## Oro Valley Water Utility

August 11, 2014

Tri Miller  
 RICK ENGINEERING COMPANY  
 3945 East Fort Lowell Road, Suite 111  
 Tucson, Arizona 85712-1046

**Subject: WATER AVAILABILITY**

**Parcels: 219-47-004B, 219-47-004C, 219-47-004A, 219-47-0050, 219-47-0060,  
 219-47-017A, 219-47-018A**

To whom it may concern:

The Town of Oro Valley Water Utility currently has water service available to the above property under the following conditions:

- A Water Plan is submitted by the applicant and approved by the Water Utility
- A Line Extension Agreement is executed by the applicant.
- All construction is in accordance with the approved Water Plan and the new facilities are accepted by the Water Utility in accordance with the requirements of the Line Extension Agreement.
- Payment of all water development impact fees, meter fees and other required fees and charges. (A water meter for residential and/or commercial use cannot be sold until after the issuance of an approved building permit.)

**WATER SUPPLY**

The Town of Oro Valley Water Utility has been designated by the State of Arizona, Department of Water Resources, as having an Assured Water Supply (AWS No. 2003-001 Decision and Order No. 26-400765). This development lies within the boundary of the Oro Valley Water Utility's planned water service area. Once the property is platted, it will be noted on the plat(s) for these properties that the property meets the State requirement of an Assured Water Supply because it will be served by Oro Valley Water Utility.

www.orovalleyaz.gov  
 11000 N. La Cañada Drive • Oro Valley, Arizona 85737  
 Phone: (520) 229-5000 • fax: (520) 229-5029

**Oro Valley Water Utility****WATER SERVICE**

The developer shall be required to submit a Water Plan identifying water system improvements. These include but are not limited to:

- Water Use
- Fire Flow Requirements
- Offsite/ Onsite Water Facilities
- Loops and Proposed Connection Points to Existing Water System
- Easements/Common Areas

Once a Water Plan is submitted, it will be determined if the proposed plan can meet the water requirements of the proposed development. The developer shall be fiscally and financially responsible for all water system improvements and modifying/enhancing the existing water system to meet those needs. It is recommended that the applicant contact the Water Utility to discuss the construction of water system improvements prior to submitting a Water Plan for the property.

This letter and the comments herein regarding water availability are valid for a period of one year only through August 11, 2015. Issuance of this letter is not to be construed as approval of a Water Plan and/or acceptance of any construction for water service.

If you have any questions or would like more details regarding any construction improvements that may be required in a Water Plan, please call me at 229-5017.

Sincerely,

A handwritten signature in black ink that reads 'Mark Moore'.

Mark Moore  
New Development Coordinator

cc: Phillip C. Saletta, P.E. Water Utility Director

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Phone: (520) 229-5000 • fax: (520) 229-5029