

# RIVER TERRACE PLANNED AREA DEVELOPMENT

City of Tucson

March 2021



# River Terrace Planned Area Development

2850, 2950, 2980 & 3030 East River Road  
Tucson, Arizona

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REZONING Preliminary Development Plan C9- <u>21-04</u> Date <u>3-4-21</u> Planning & Development Services
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PART I Introduction & Policy



## A. Project Overview

The River Terrace Planned Area Development (PAD) creates a distinctive community on an approximately 7.68-acre property in the Catalina Foothills located on the north bank of the Rillito River (see *Exhibit I: Regional Context Map and Exhibit II.A: PAD Location*). This PAD transforms the property into a contemporary urban development. Heavy emphasis is placed on site design and building materials to introduce a high-quality, urban housing product in a desirable location. Integrated commercial elements serve new residents and surrounding neighbors while building on the activity found in St. Philip’s Plaza at the intersection of River Road and Campbell Avenue to the west. The Chuck Huckleberry Loop (“The Loop”) regional trail system is an integral part of the development. The PAD is oriented to treat The Loop as a major asset, providing convenient access to recreation, shopping, and employment areas.

## B. Rationale and Benefits for Use of a PAD

A PAD approach was deemed appropriate due to the development’s mixed use nature, surrounding context, and on-site constraints, including topography and drainage. Applying traditional zoning categories to this irregularly-shaped property would require several variances and special exceptions, without which the proposed development would not be feasible. The creation of a PAD provides the flexibility to develop site-specific solutions to address existing constraints. Additionally, the PAD allows for design guidelines to prescribe a vision for the property, ensuring a high-quality finished product that complements surrounding land uses.

## C. Benefits to the Community

The River Terrace PAD generates considerable benefits to the community by:

- Creating a unique neighborhood that complements the surrounding community;
- Adding economic vibrancy in the area;
- Focusing connection to The Loop and encouraging alternate modes of travel, thereby reducing traffic on local roads;
- Adding product variety to existing housing stock while increasing home values;
- Utilizing existing infrastructure to capitalize on current capacity; and

Exhibit I: Regional Context Map





- Providing a complementary mix of uses that creates a livable community in proximity to services and recreational amenities.

## D. Conformance with Adopted Plans

The PAD District is consistent with policy recommendations in the City’s Plan Tucson and the Catalina Foothills Subregional Plan (CFSP). Both stress compatibility between uses, the promotion of commercial development along arterial corridors, regional trail connectivity, and the protection of established neighborhoods.

### 1. Plan Tucson

As shown in *Exhibit I.D.1: Plan Tucson Future Growth Scenario Map*, the PAD is located within an area designated as Potential Annexation Areas. The ultimate goal for properties identified for potential annexation is to have urban commercial and residential areas located within city limits. The goal of the PAD is to promote River Terrace as a logical site for mixed-use development within the City of Tucson.

The PAD meets Plan Tucson’s goals and policies by providing high-quality, market-rate housing and commercial development along a major corridor and urban trail system. Connecting to The Loop further enhances Tucson’s appeal as a healthy, active, outdoor community connected to the natural environment. Existing infrastructure will be leveraged to promote sustainable, higher density redevelopment with the opportunity to introduce low impact development techniques to the site. Urban design elements within River Terrace connect public, semi-public, and private spaces and allow for a range of mobility options. Other related goals and policies include:

### The Social Environment

- **Goal 1:** A mix of well maintained, energy-efficient housing options with multi-modal access to basic goods and service, recognizing the important role of homeownership to neighborhood stability.
- **Policy H11:** Encourage residential development including both market rate and affordable housing projects in Tucson.
- **Policy PR4:** Ensure a range of recreational opportunities from passive to active.
- **Policy PR9:** Develop an urban multipurpose path system that provides mobility options, with recreational and health benefits, to access parks, residential areas, places of employment, shopping, schools, recreational facilities, transportation hubs, natural resources, and watercourses for people of all abilities.
- **Policy PH1:** Pursue land use patterns; alternate mode transportation systems, including multipurpose paths; and public open space development and programming that encourage physical activity, promote healthy living, and reduce chronic illness.





### *The Economic Environment*

- **Policy BC5:** Foster the success of commercial areas, including downtown; major corridors; and arts, entertainment, and business districts through targeted investment, incentives, and other revitalization strategies.
- **Policy BC8:** Support a safe, distinctive, well-maintained, and attractive community with neighborhoods made up of residences and businesses that contribute to Tucson's quality of life and economic success.
- **Policy TQ5:** Promote Tucson as a premier healthy lifestyle, outdoor, and recreational destination for cycling, hiking, bird watching, astronomy, nature, desert ecology, golf, spas, wellness, and healthcare.

### *The Natural Environment*

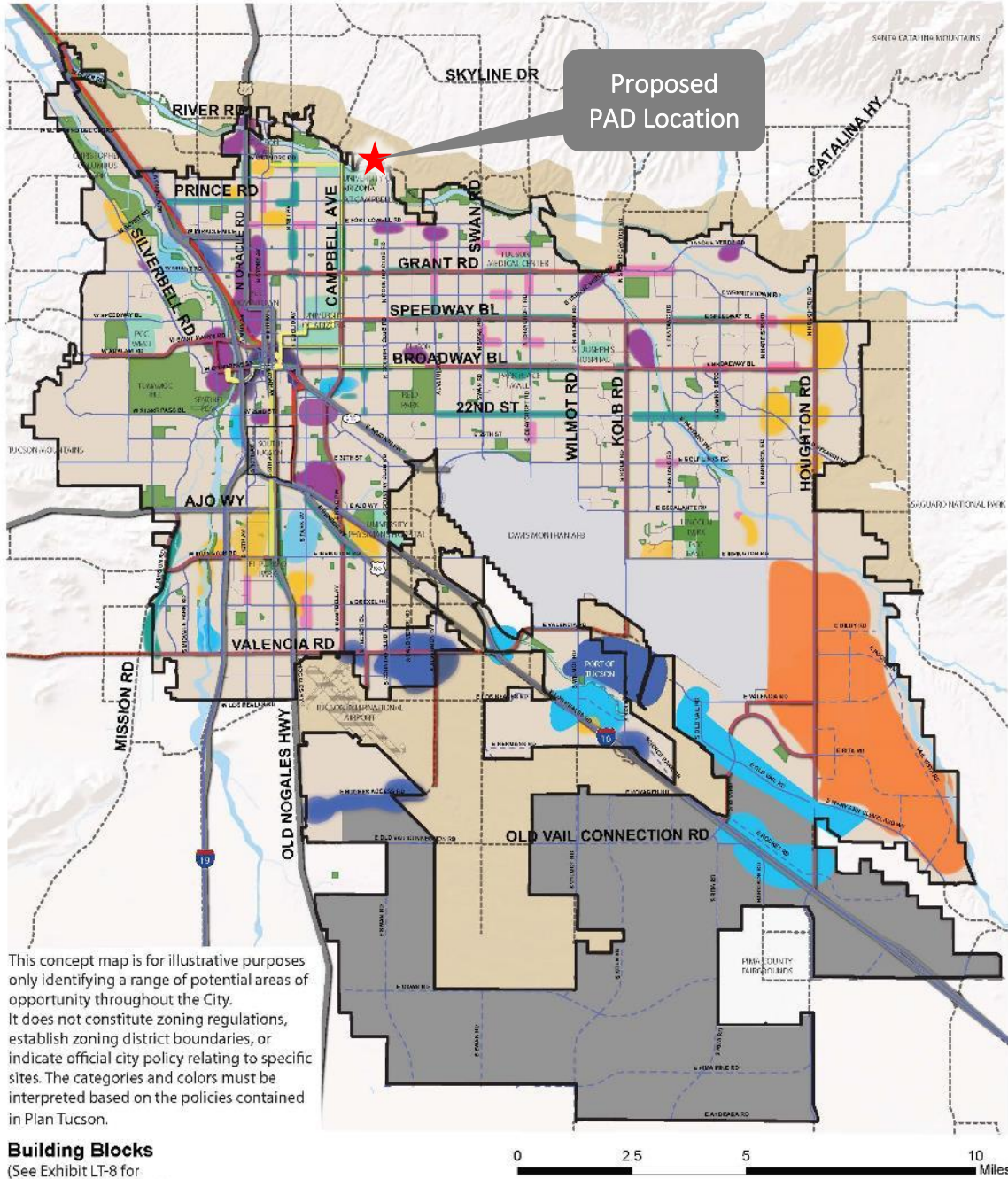
- **Policy EC4:** Increase the use of low carbon and renewable energy sources, high fuel efficiency vehicles, and non-motorized transportation.
- **Policy WR8:** Integrate the use of green infrastructure and low impact development for stormwater management in public and private development and redevelopment projects.
- **Policy GI1:** Encourage green infrastructure and low impact development techniques for stormwater management in public and private new development and redevelopment, and in roadway projects.
- **Policy GI3:** Create and maintain a connected urban greenway system for non-motorized mobility and to provide human and environmental health benefits.

### *The Built Environment*

- **Goal 25:** An urban form that conserves natural resources, improves and builds on existing public infrastructure and facilities, and provides an interconnected multi-modal transportation system to enhance the mobility of people and goods.
- **Policy LT3:** Support development opportunities where:
  - a. residential, commercial, employment, and recreational uses are located or could be located and integrated.
  - c. multi-modal transportation choice exists or can be accommodated.
  - d. there is potential to develop moderate to higher density development.
- **Policy LT4:** Ensure urban design that:
  - b. integrates alternative transportation choices, creates safe gathering places, and fosters social interaction.
  - e. takes into account prominent viewsheds.
- **Policy LT9:** Locate housing, employment, retail, and services in proximity to each other to allow easy access between uses and reduce dependence on the car.
- **Policy LT14:** Create pedestrian and bicycle networks that are continuous and provide safe and convenient alternatives within neighborhoods and for getting to school, work, parks, shopping, services, and other destinations on a regular basis.



Exhibit I.D.1: Plan Tucson Future Growth Scenario Map



This concept map is for illustrative purposes only identifying a range of potential areas of opportunity throughout the City. It does not constitute zoning regulations, establish zoning district boundaries, or indicate official city policy relating to specific sites. The categories and colors must be interpreted based on the policies contained in Plan Tucson.

**Building Blocks**

(See Exhibit LT-8 for general descriptions of the building blocks):

- Downtown
- Mixed-Use Centers
- Business Centers
- Industrial Areas
- Mixed-Use Corridors
- Neighborhood Centers
- Campus Areas
- Neighborhoods of Greater Infill Potential
- Houghton Corridor Area
- Existing Neighborhoods
- Potential Annexation Areas

- Southlands
- Existing Parks/Open Space
- City of Tucson Boundary

**From Major Streets and Routes Plan:**

- Future Roads
- County Major Routes
- Major Highways
- Major Roads

**From 2040 Regional Transportation Plan:**

- Planned Bus Routes (BRT, Express and Circulator)
- Planned Streetcar
- Planned Commuter/Intercity Rail

Map available online at [www.tucsonaz.gov/plantucson](http://www.tucsonaz.gov/plantucson)

Map and legend may vary slightly from each other. Colors may also vary depending on printer used.



## 2. Catalina Foothills Subregional Plan

River Terrace PAD is located within the Catalina Foothills Subregional Plan (CFSP). The CFSP was adopted by the City of Tucson Mayor and Council, December 1995 (Resolution No. 17106). Subregional plans were developed to establish future land use and development direction for areas that are adjacent to the City and have potential for future City annexation. The subregional plan becomes effective for an area that is located within the plan boundaries after the area is annexed into the City and that portion of the plan is adopted by Mayor and Council.

The CFSP does not provide specific land use direction for the property but does include a maximum height restriction of twenty-four (24) feet without specific authorization from the City of Tucson Mayor and Council. Mayor and Council authorization is requested to allow greater building heights per this PAD. Given that the closest residential structures are over 200 feet away, and most homes north of River Road sit higher in elevation, additional height of proposed buildings will not impede nearby residents' views.

### E. Compatibility with Adjoining Land Uses

The mix of proposed residential and commercial development is appropriate for the surrounding area given that the property is located on a major thoroughfare and connects to a prominent regional trail system. Access to the regional trail system will occur along the eastern and southeastern property boundaries at the convergence of three paths. Due to a grade differential, buildings along the southern property boundary will overlook The Loop and Rillito River while taking advantage of city views to the south. An off-site concrete drainage channel along the western property boundary separates the site from the school to the west. River Road, a scenic arterial, runs along the northern property boundary. Appropriate scenic setbacks and buffers are included in this PAD.

### F. Suitability with Existing Infrastructure

Existing infrastructure is in place to support the proposed development. The property is located on River Road, an arterial street, with water, sewer, and electric infrastructure in place. The property is in Tucson Water's Obligated Service Area, and service will be provided to the site as indicated in *Exhibit V.J.3: Tucson Water Letter*. Pima County Regional Wastewater Reclamation Department has identified that capacity is available to accommodate the proposed development. See *Exhibit V.J.1.b*.





# PART II PAD Proposal





## A. Plan Overview

The River Terrace Planned Area Development (PAD) envisions the development of an approximately 7.68-acre property located on the north bank of the Rillito River, south of River Road. This development contemplates a blend of urban residential housing mixed with neighborhood-level commercial uses.

Uses within River Terrace are permitted per OCR-1 with minor modifications. PAD development standards are based on the OCR-1 zone but have been tailored to respond to the site and surrounding context in a manner that facilitates a cohesive mix of housing and commercial opportunities. Where the PAD varies from the UDC or other relevant City standards, the PAD shall apply. In instances where the PAD is silent in providing development direction, the provisions of the UDC for the OCR-1 zone, the Administrative and Technical Standards Manuals, and other relevant City standards shall apply.

## B. Land Use Plan

As demonstrated in *Exhibit II.B.1: Land Use Plan* and *Exhibit II.B.2: Conceptual Site Plan*, The River Terrace PAD consists of a single comprehensively planned land use designation (or Planning Area) that carefully blends residential and commercial uses in a contemporary urban setting. Land uses are intended to connect seamlessly with each other and the existing Loop trail network. Residential options consist of single or multi-family housing, while commercial uses introduce retail, office, and dining options.

The Village Court will provide flexibility that is responsive to an ever-changing economic market so that the developer can adapt to specific market conditions within a timely manner while preserving the overall intent and

guiding vision of the PAD. The following provides a brief description of each of the planning areas and further provides regulation relating to uses, physical character and intensity of development on the property.

### 1. Village Court (VC)

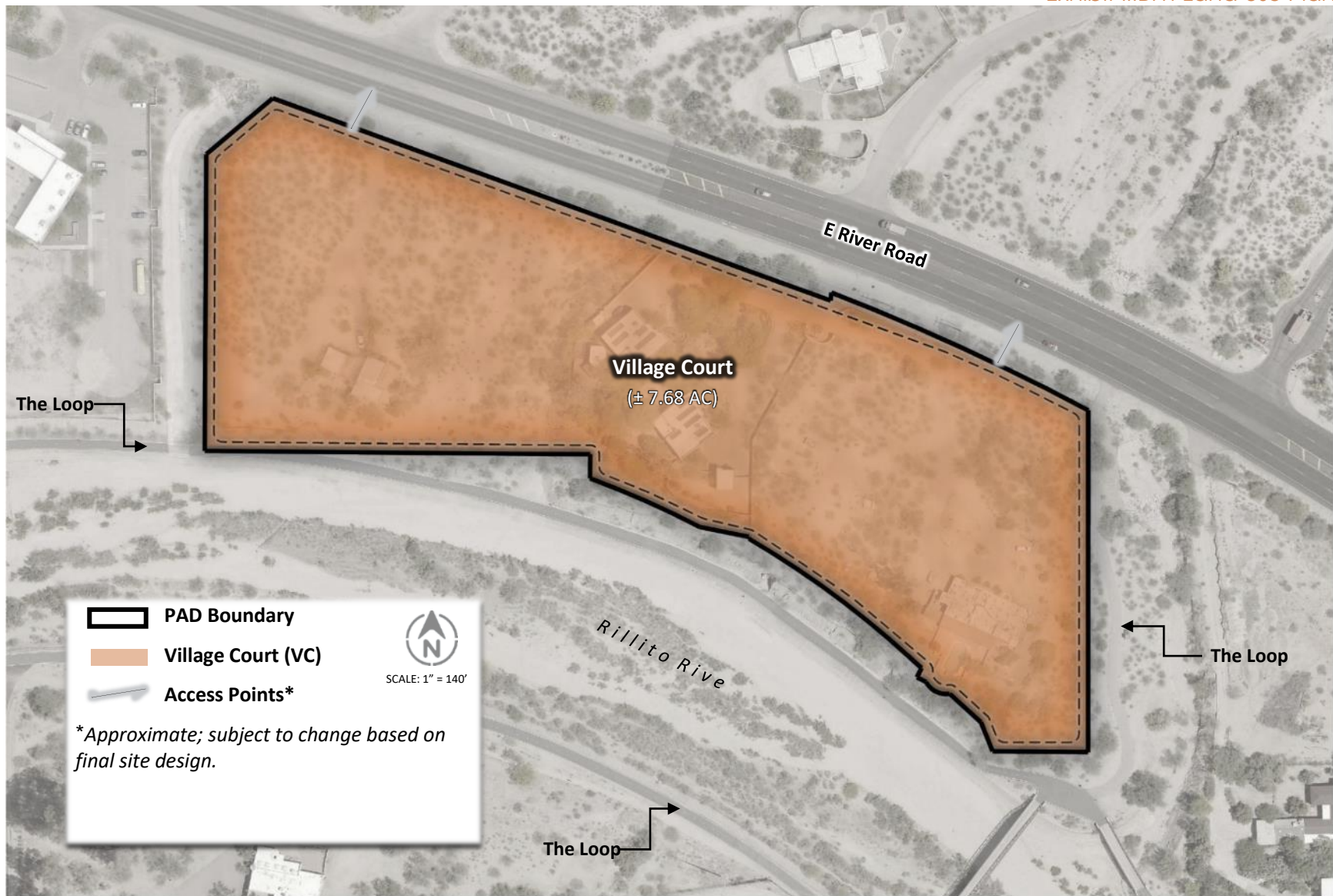
The Village Court designation provides for the following:

- a. **Attached or detached, single-family residences and multi-family residential uses** with a maximum density of thirty-six residences per acre (RAC). Homes will be up to three stories in height with balconies and roof deck amenities to maximize views. Vehicular access and circulation will be provided via private streets and/or drives to vary the housing orientation and produce a more pedestrian-friendly experience. A central plaza connects residents to a common amenity area that traverses the site and directs residents toward the commercial and recreational elements to the east. Residential amenities in the Village Court may be centrally located and on roof decks or balconies.



- b. **A mix of compatible commercial uses.** The commercial component will provide a neighborhood-scale commercial experience for River Terrace residents, adjacent neighbors, and The Loop users. Potential uses could include a bicycle shop, café/bistro, professional offices or boutique shopping. Residential opportunities may be standalone or vertically integrated with commercial uses into multistory buildings. Building vertically will allow for increased residential density and flexibility to create a walkable, urban activity area in a relatively small, compact area.
  
- c. **Structured parking** may be necessary to accommodate the proposed uses and will likely be integrated into the building designs of future end-users. The eastern edge of the property fronts onto a paved multi-use path that connects to The Loop. Access to regional shopping, dining, and recreational amenities via The Loop presents an excellent opportunity to promote healthy lifestyles and alternative transportation methods. As such, on-site open space and recreation will feature commercial plazas, patios, and sitting areas to attract people recreating along The Loop and to encourage active, well-used public spaces. The public market plaza terracing down to The Loop will provide retail and restaurant opportunities that can be accessed directly from the regional network of The Loop.











## C. Circulation Plan

River Road runs along the northern boundary of the property and serves as the main connection to the regional transportation system. As described in greater detail in the accompanying Traffic Impact Analysis (TIA) prepared by PSOMAS, River Terrace will include two driveways. The west driveway will provide full outbound access (left and right turns) but will only allow right turns into the Village Court. The east driveway in and out of the Market Square will be a full access driveway. The entire Traffic Impact Analysis (TIA) has been submitted under separate cover. See sections 2.1 and 4.1.1 of the TIA for additional roadway and site circulation information. Per section 4.4 of the TIA, River Terrace PAD has no impact on existing roadways.

As shown in the example images below, vehicle conveyance within the Village Court area is handled by private roadways and drives with homes accessed from either the front or rear. Access through the Market Square to the VC area may be controlled by a vehicle gate off the east driveway. Although not shown in *Exhibit II.B.2*, the west driveway may also be gated.



Pedestrian circulation is designed to maximize connection to The Loop and promote alternate modes of transportation. Where possible, pedestrians are separated from vehicular areas. Proposed rights-of-way (ROW) within the Village Court are also narrower and may include street furnishings and decorative paving to encourage lower travel speeds. The goal of the circulation design proposed for the Village Court is to promote walkability and neighbor interaction while reducing automobile use and dependency.

The VC's central courtyard is oriented from east to west, directing residents toward the Market Square and The Loop. Buildings within the MS are oriented to provide access to and from the Hacienda del Sol Wash paved connection to The Loop running along the entire eastern property boundary. A terraced market plaza as depicted in *Exhibit II.B.2: Conceptual Site Plan*, could make River Terrace an easily-accessible destination at the convergence of the two pedestrian bridges and the connector path. Possible enhancements may take the form of decorative hardscape, shade trees, seating, landscape, signage, and lighting.



## D. Landscape Plan

The River Terrace PAD Landscape Plan aims to meet the following objectives:

- Create a distinct urban character while maintaining connection with the desert setting
- Enhance outdoor comfort using shade, color and texture
- Soften transitions between conflicting uses
- Screen adjacent uses where appropriate
- Conserve water by selecting suitable plant material and irrigation methods

### 1. Landscape Borders and Screening

- a. Scenic Landscape Border – River Road: The landscape in this area provides a buffer between River Road, a Scenic Arterial, and the property. This buffer is designed for an enhanced natural aesthetic, with informal plant layout and species highlighting the natural beauty of the Sonoran Desert. Plant density occurs at a higher frequency within the buffer than the surrounding natural desert.

Therefore, the required 30-foot natural buffer shall allow for augmentation per this PAD. River Terrace PAD shall also allow up to a 10-foot reduction in the width of the buffer area if a wider buffer area is provided elsewhere along River Road. The minimum required square footage of landscaping per the 30-foot natural buffer area requirement must still be met or exceeded.

No screening is required along River Road.

- b. Interior Landscape Borders: There shall be no required interior landscape borders per the City of Tucson Unified Development Code (UDC) Section 7.6.4.C.4.c.2 which states, *“Interior landscape borders are not required as follows: Where an alley, drainageway, or other right-of-way ten feet or more in width physically separates the site from an adjacent property.”* River Terrace is surrounded on three sides by drainageways. Per Pima County Flood Control, landscape planting within some portion of the River Park dedication area may be permissible with appropriate maintenance agreements and a Facility Impact Permit (FIP).
- c. Interior Screening: Buffer and screen adjacent uses of varying intensity with native or desert-adapted, low water use plants. Vegetation may be used to create a visual separation between land uses of different intensities in lieu of a prescribed screen height or material.

### 2. Parking Areas

- a. Surface Parking: Landscape will enhance the visual appeal of surface parking areas by incorporating appropriate plantings, providing canopy trees, and directing stormwater runoff into landscape areas where feasible.
- b. Parking Structures: Landscape will be applied to soften the exposed mass of parking structures and mitigate heat gain.



### 3. Common Areas and Amenities

- a. Common areas and amenity spaces will be designed to accommodate gathering, seating, dining, and recreation. Plant material, site furnishings, and hardscape surfaces will be selected to reflect a high-quality design aesthetic.

### 4. Entries

- a. Entry areas provide an opportunity to express the character of the proposed development. Design themes and materials are introduced upon arrival and contribute to sense of place.



## E. Drainage Plan

The proposed drainage scheme will modify the existing drainage patterns to prevent flow over the southern slope focusing on utilizing the existing three channels as a means of conveyance. One significant change from existing conditions is that Wash 3 will be undergrounded in a pipe from the outlet of the River Road culvert to the Rillito River soil cement bank protection. The site will be broken into three (3) proposed on-site subwatersheds graded to drain as depicted in *Exhibit II.E: Conceptual Drainage Plan*.

Two small watersheds draining off River Road, Watersheds 2 and 4, largely nuisance drainage, will concentrate on the northern boundary of the project. These flows will need to be accommodated in right-of-way and conveyed west to Wash 1.

The main conveyance mechanism for proposed on-site drainage will be via the streets and surface drainage. A catch-basin inlet will be located at CP B that combines with off-site drainage in the sub-surface pipe. A preliminary size for the pipe is 36" and that will convey both off-site and on-site flow while keeping the hydraulic grade line below the ground. Significant mitigation will be required at the outlet because of the slope and subsequent velocity in the pipe. See *Exhibit II.E* and refer to flow arrows to see where site drainage is concentrating.

A drainage easement will be provided over the top of the 36" pipe that will allow future maintenance or repairs as necessary over the life of the structure.

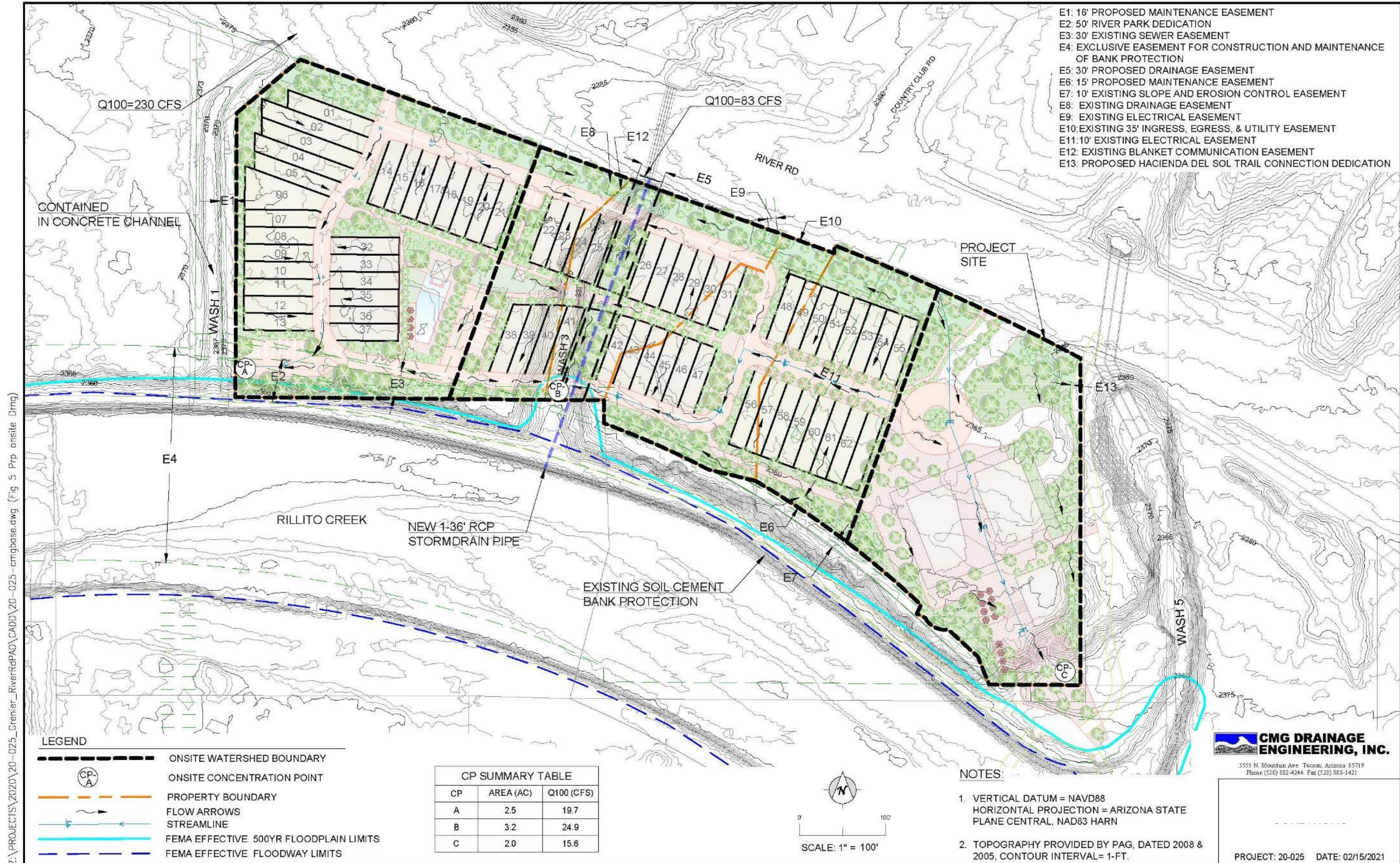
On-site drainage shall be conveyed under the Loop river path. Any increased and/or concentrated onsite run-off that is to be conveyed through the River Park pathway area shall be via a drainage pipe/structure/scupper under the path, and will require a Facility Impact Permit. Any bank protection disturbance must be in accordance with Regional Flood Control District standard DS-304. This work also requires a FIP since any impacts to District Facilities requires a Facility Impact Permit.

The density of the site and increased impervious surfaces will increase site generated peak discharges in proposed conditions. The site is adjacent to the Rillito River and will likely qualify for a detention waiver. Dialogue from the pre-application meeting confirms that the City will still require 5-year threshold retention. For planning purposes, this volume has been calculated at 0.32 Ac-ft. 0.11 Ac-ft of retention volume should be provided in each of the three (3) on-site subwatersheds. Exact retention area locations will be determined at the time of development plan submittal.

Fifty feet from top of the Rillito Creek bank protection shall be dedicated to the District for flood control maintenance purposes as shown on *Exhibit II.B.2: Conceptual Site Plan* and *Exhibit II.E: Conceptual Drainage Plan*.







Z:\PROJECTS\2020\20-025\_Grenier\_RiverTerracePAD\CADD\20-025-cmgbase.dwg (Fig 5 Prp onsite Dmg)





## F. Grading Plan

As shown in *Exhibit II.F: Conceptual Grading Plan*, major cut and fill is not anticipated, and will generally be about one to two feet. Within the River Park dedication area, erosion on steep slopes adjacent to the linear park should be mitigated to provide appropriate, stable transition between the new development and the path. Any erosion control installed or maintained by the District must permit access from the top of slope. An on-site landscape buffer (15') adjacent to the River Park side of the development is preferred due to these slopes. An additional slope easement or slope mitigation may be required based on final site layout and design.

Exhibit II.F: Conceptual Grading Plan



NORTH  
SCALE: 1"=150'



## G. Phasing Plan

Development phasing for the PAD will generally proceed as follows:

- a. Development will likely proceed west to east, commencing with residential construction. This generalized phasing is entirely dependent upon market demand and may differ at the time of development.
- b. No sewer improvements are needed other than connecting to the existing on-site sewer. Drainage improvements and landscaping along River Road will be completed in the first phase of construction and any other infrastructure and utilities needed to serve River Terrace development shall be constructed per approved development plans during the appropriate phases. A direct pedestrian connection to the River Park or to the trail along the Hacienda del Sol wash will be provided in the first phase to provide access to The Loop. Appropriate connections to the River Park will be coordinated with the District including obtaining a Facility Impact Permit (FIP).

According to the Federal Aviation Administration (FAA) Notice Criteria Tool, this project area is located in proximity to a navigation facility and could impact navigation signal reception. As the project site develops every project applicant shall file FAA Form 7460 with the FAA at least 45 days before construction activities begin for every proposed project unless FAA staff, with the Obstruction Evaluation / Airport Airspace Analysis (OE/AAA), provides the project applicant with written communication that filing FAA Form 7460 is not required. It is highly recommended that the applicant file earlier than 45 days to provide the applicant with sufficient time to respond to any concerns which are identified by the FAA. Any cranes which are used must also be identified with Form 7460. Please file Form 7460 at <https://oeaaa.faa.gov/oeaaa/external/portal.jsp>

## H. Infrastructure Phasing and Construction

### 1. Sanitary Sewer Disposal

The site is served by Pima County Wastewater Reclamation Department and capacity is expected to be adequate for the proposed development within the PAD. Public sewer line extensions will be required to provide sanitary sewer service to the various parts of the site. The discharge point for the new public sewer will be the existing 36" public sewer main running through River Road and on the western portion of the site.

### 2. Stormwater Drainage

The site directly discharges into the Rillito River. By implementing stormwater management procedures, the future site will retain the 5-year storm event in several small water harvesting retention basins before direct discharging into the Rillito, slightly reducing the overall discharge from the site.

### 3. Solid Waste Disposal

Solid waste disposal will be provided either by the City of Tucson or a private contractor.



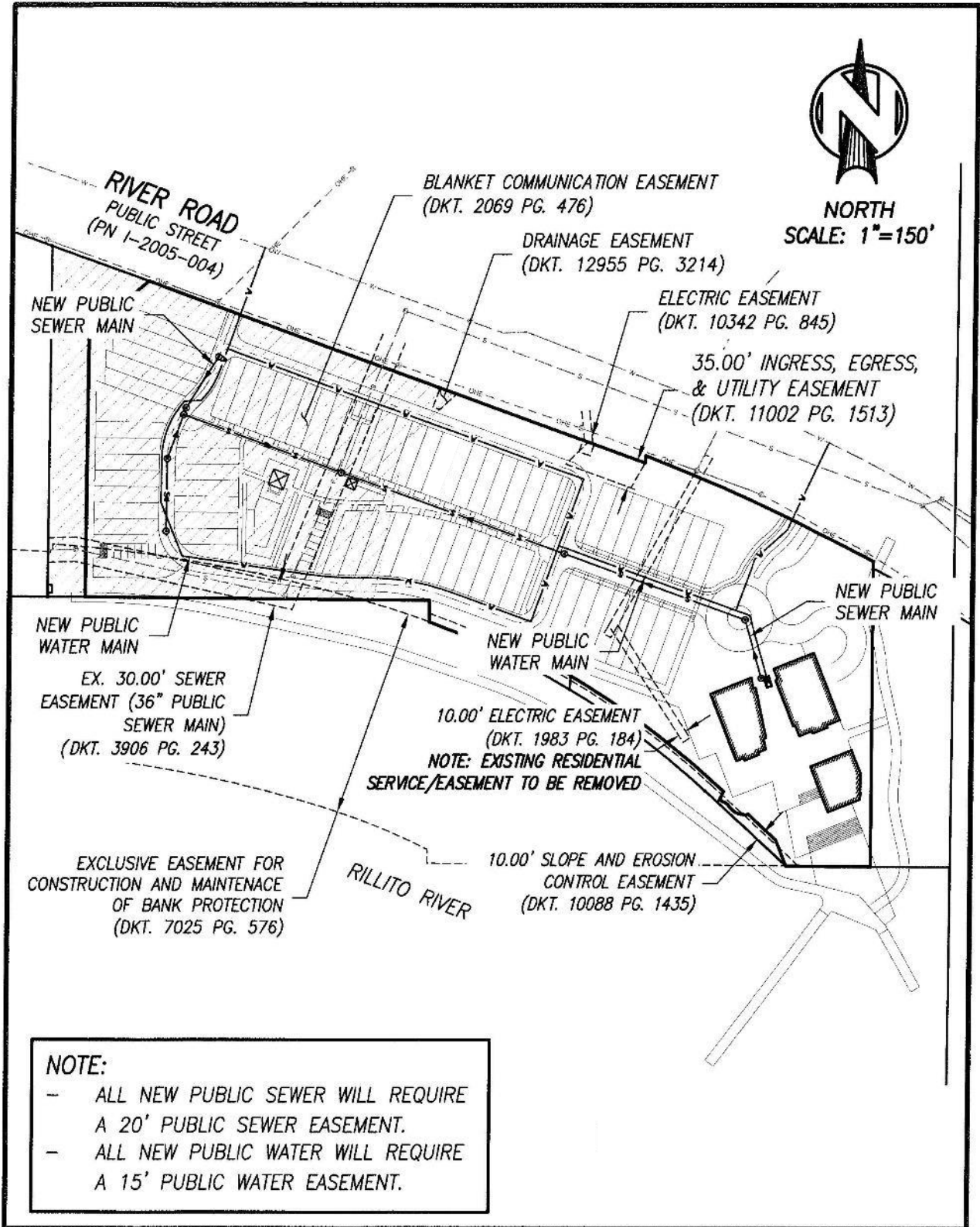


#### 4. Public Utilities

Infrastructure for water (Tucson Water), telephone, electricity (Tucson Electric Power) and gas (Southwest Gas) will be provided from existing infrastructure in River Road.

In general, utility installation shall be done at the initial phases of construction. New water mains shall not be trenched until the site is graded to near finish grade. The central drainage wash is proposed to be infilled and replaced with an underground drainage culvert. This drainage work shall be done prior to major earthwork construction.





# PART III Development Regulations





## A. Development Regulations

This section provides development regulations for the Village Court (VC) Planning Area. All new development within the PAD shall conform to applicable building, fire and other applicable safety standards. For the purposes of the PAD, building height shall be measured to the highest point of a flat roof or the midpoint between the eave and ridge of the highest gable of a pitched or hipped roof.

### 1. Village Court (VC)

The following provides residential and non-residential development standards applicable to the VC Planning Area. Due to site and development constraints, uses are permitted per OCR-1, but development standards are based on various commercial zones with minor modifications.

#### *a. Permitted and Prohibited Uses*

Per those listed under OCR-1 in UDC Table 4.8-4: Permitted Uses – Commercial and Mixed Use Zones with the following modifications. Use specific standards in the UDC shall apply unless otherwise modified herein.

#### **Additional Permitted Uses:**

- Artisan Residence where artists can live and work in the same place shall be a permitted use subject to the C-3 Use Specific Standards in UDC Table 4.8-4.
- Alcoholic Beverage Service as an accessory to a Food Service use shall be permitted.
- A microbrewery shall be permitted with or without Alcoholic Beverage Service or a Food Service use. Use specific standards 4.9.5.E.6, 7, & 8 are not applicable.
- Recreation uses such as pools, ball courts, ramadas, barbeque grills, playground equipment, public plazas and other general recreation facilities shall be permitted.

#### **Additional Prohibited Uses:**

- Correctional Use
- Soup Kitchens
- Household Goods Donation Center
- Uses within the Restricted Adult Activities Use Group
- Swap Meets and Auctions
- Vehicle Repair, Rental and Sales

All uses within the Storage Use Group, including Commercial Storage, Hazardous Material Storage as an accessory use, and Personal Storage



## b. Residential Development Standards

### Single Family – Detached

Maximum Density: 36 residences per acre

Maximum Lot Coverage: 90%

Maximum Building Height: 40 feet

Setbacks from the property line:

#### *Front Yard:*

- Front Entry Garage: 5 feet if all required parking is provided in garages and separate community parking area(s). Otherwise, 18 feet.
- Alley Entry / Private Accessway to Garage: 2 feet

*Side Yard:* a minimum separation of 5 feet between buildings (zero-lot line development is permitted)

#### *Rear Yard:*

- Main Structures: 5 feet
- Rear Entry Garages: 2 feet

### Single Family – Attached

Maximum Density: 36 residences per acre

Maximum Lot Coverage: N/A

Maximum Building Height: 40 feet

Setbacks from the property line:

#### *Front Yard:*

- Main Structures: 5 feet
- Front Entry Garage: 5 feet if all required parking is provided in garages and separate community parking area(s). Otherwise, 18 feet.
- Alley Entry / Private Accessway to Garage: 2 feet

*Side Yard:* 0 feet

#### *Rear Yard:*

- Main Structures: 5 feet
- Rear Entry Garages: 2 feet

### Multi-Family

Maximum Density: 36 residences per acre

Maximum Lot Coverage: N/A

Maximum Building Height: 65 feet

Minimum Building Setbacks from the PAD boundary:

- North (To River Road): 20 feet or 1:1 ratio of setback to proposed building height, whichever is greater
- South (To Rillito River): 0 feet (Must be outside of all Flood Control dedications/easements)
- East (To 100-foot Wide Pima County-Owned Parcel): 0 feet



- West (To 40-foot Concrete Drainage Channel): 0 feet
- Internal (To Adjacent Single-Family Units): 20 feet

Minimum Distance between Buildings: 10 feet

### c. *Non-residential Development Standards*

Minimum Lot Area: None

Minimum Lot Width: None

Maximum Building Height: 65 feet

Separation Between Buildings: Per International Building Code

Minimum Building Setbacks from the PAD boundary:

- North (To River Road): 20 feet or 1:1 ratio of setback to proposed building height, whichever is greater
- South (To Rillito River): 0 feet (Must be outside of all Flood Control dedications/easements)
- East (To 100-foot Wide Pima County-Owned Parcel): 0 feet
- West (To 40-foot Concrete Drainage Channel): 0 feet
- Internal (To Adjacent Single-Family Units): 20 feet

Maximum Lot Coverage: None

## B. Additional Development Standards

### 1. Circulation Standards

#### a. *Street Cross-sections*

Commercial Access Drive: utilize a minimum 30-foot right-of-way, which includes two vehicular travel lanes and an ADA compliant path for pedestrians with either vertical separation or two to three-feet of horizontal separation between the travel lane and path.

Private Drive: utilize a 20 to 40-foot right-of-way, which includes two vehicular travel lanes and an ADA compliant path for pedestrians with either vertical separation or two to three-feet of horizontal separation between the travel lane and path.

### 2. Scenic Routes

River Road is designated as a Scenic Arterial Street. The following provisions of the Scenic Corridor Zone (SCZ) apply to areas of the property within four hundred (400) feet of the future right-of-way line of River Road. The following provisions supersede those in Article 5, Section 5.3 Scenic Corridor Zone of the UDC. No additional SCZ review process as referenced in the UDC is required. Public process requirements have been satisfied through the PAD approval process; no further public process is required.

#### a. *Replanting and Additional Vegetation*

An average 30-foot wide buffer adjacent to the MS&R right-of-way line of River Road is proposed for the purposes of the SCZ. Therefore, if it is less than 30 feet in one location, the difference must be accounted for somewhere else along River Road. The buffer may

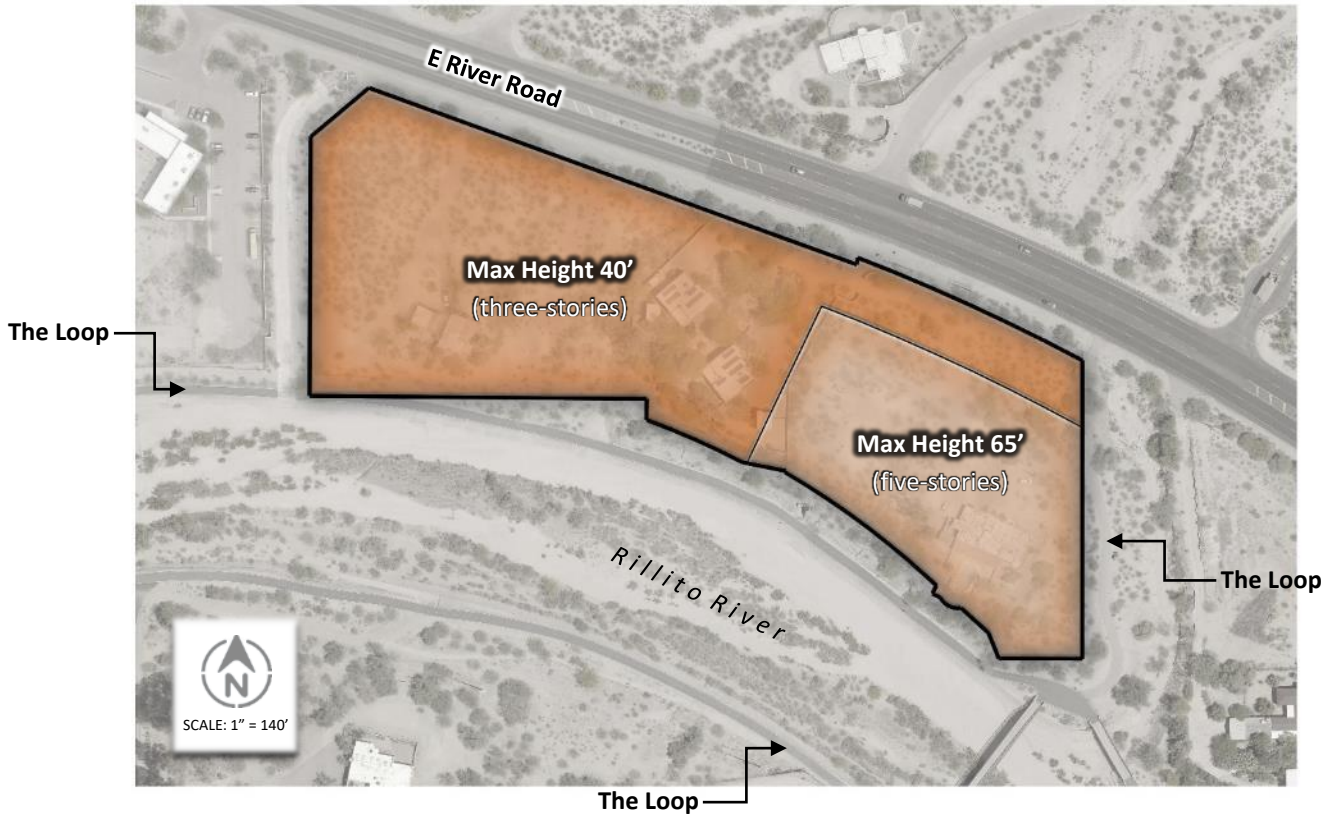




be comprised of natural and/or graded and revegetated/landscaped areas. Additional native or drought-tolerant plant material may be added to the buffer area to increase the plant density and visual appearance of the buffer, or as a receiving area for purposes of native plant preservation or revegetation.

**b. Structure Heights and Setbacks**

Structure heights will be limited to the prescribed building heights for the Village Court Planning Area as shown below and shall be set back from River Road at a one-to-one (1:1) ratio based on the proposed building height.



**3. Landscape and Screening Standards**

- a. Street Landscape Border – River Road: The street landscape border along River Road shall be an average of 30 feet in width. The border may be revegetated and enhanced with additional naturalistic plantings.
- b. Perimeter Landscape Borders: No landscape borders are required for the south, east and west property boundaries. Landscape applications in these areas shall be left to the discretion of the developer.



- c. Parking Area Landscape – Surface Parking: Canopy trees shall comply with UDC Section 7.6 Landscaping and Screening requirements and shall aid in the mitigation of urban heat island effect.

#### 4. Water Conservation Standards

Conservation standards will be accomplished via low water use plants, efficient irrigation and rainwater harvesting.

##### *a. Low Water Use Plants*

The plant palette will consist of predominately low water use, native and regionally adapted plants. The plants will be located relative to their functionality and the uses associated with the Planning Areas within which they are planted. The use of low water use plants in locations appropriate with their species characteristics provides for the conservation of potable water while assuring the survivability and long-term health of such plant material.

##### *b. Irrigation*

Plants requiring irrigation shall be irrigated by means of an efficient underground drip irrigation system. Underground drip systems reduce water evaporation and waste, thereby conserving water. The irrigation system will be controlled by a programmable controller which can be used to adjust irrigation schedules. The use of different seasonal irrigation schedules reduces the amount of water applied during cooler and wetter periods. Irrigation systems shall be fitted with irrigation controllers and shall be capable of monitoring and responding to plant water needs through the use of weather stations and/or evapotranspiration data. The technology chosen should be capable of preventing the irrigation system from running if sufficient moisture is present to support the vegetation.

##### *c. Rainwater Harvesting*

A water harvesting plan will be prepared for commercial uses at the time of development plan submittal in compliance with City of Tucson Development Standards, illustrating 35 percent of the estimated landscape water budget is met by water harvesting techniques. The water harvesting plan will utilize passive water harvesting techniques to collect rainwater and direct it to planting areas, thereby reducing the consumption of potable water for irrigation purposes. Several passive rainwater harvesting techniques may be employed to direct surface water and capture rainfall for the benefit of the landscape, including but not limited to: curb cuts, flush curbs, recessed planting areas, minimized compaction of planting areas, and semi-pervious pavers.

#### 5. Parking and Loading Standards

Each Planning Area will comply with the Motor Vehicle and Bicycle Parking Requirements of Section 7.4 of the UDC. Required loading will be provided in accordance with Section 7.5 of the UDC.



Vehicle use areas shall be constructed utilizing materials and construction techniques in accordance with geotechnical engineering recommendations and concurrence from the City of Tucson. Per Figure 7.4.6-A of the UDC, the minimum two-way parking area access lane (PAAL) shall be 24 feet wide.

Accessible parking will be provided in accordance with the requirements noted in the 2012 IBC Chapter 11 and the ICC A117.1-2009. Accessible spaces and “Van Accessible” spaces will connect to the accessible route as required by ICC A117.1-2009 Edition. Newly constructed and modified sidewalks, detectable warnings and curb ramps will comply with accessibility requirements as required.

## 6. Signage and Monumentation

Signage and monumentation within the PAD shall comply with the applicable City of Tucson Sign Code and sign regulations.

## 7. Solid Waste Standards

All required solid waste and recycle materials collection and storage shall be designed in accordance with the City of Tucson Technical Standards Manual, Section 8: Solid Waste and Recycling Disposal, Collection, and Storage Standards.

Solid waste and recycling collection and storage containers associated with standalone non-residential uses shall be setback a minimum of 25 feet from any residential use.

## 8. Lighting

All outdoor lighting shall comply with the City of Tucson Outdoor Lighting Code. Street lighting is not required for public or private streets. Lighting may be integrated at the discretion of the future developer(s). In addition, lighting may be provided to illuminate common areas, residential lots, and mixed use commercial sites using full cut off lights and landscape accent lighting in accordance with the Outdoor Lighting Code.

## 9. Cultural Resources

According to a search of the archaeological site files and records contained within AZSITE and at the Arizona State Museum Archaeological Records Office, 40 archaeological survey projects have been conducted in or within one mile of the River Terrace PAD. These projects were conducted between 1981 and 2013 for various commercial, private and public developments. Fourteen archaeological sites have been identified within one mile of the property. One site is adjacent to and may partially extend into the southeast corner of the property.

The entire PAD has had a Class III Survey conducted on it that meets Arizona State Museum (ASM) and State Historic Preservation Office (SHPO) standards. If determined that archaeological resources are present, a testing program will be initiated. When testing reveals significant resources eligible for the National Register, every effort will be made to review the project to determine if an adverse effect can be avoided. If it cannot be avoided, a testing





report and data recovery plan shall be submitted to the City of Tucson Historic Preservation Office. Once approved, execution of the data recovery plan may proceed. Historic or prehistoric features or artifacts discovered during future ground disturbing activities should be reported to the City of Tucson Historic Preservation Officer. Pursuant to A.R.S. 41-865 the discovery of human remains, and associated objects found on private lands in Arizona must be reported to the Director of Arizona State Museum.

If previously undocumented buried cultural resources are identified during ground-disturbing activities, all work in the immediate vicinity of the discovery should stop until the find can be evaluated by a professional archaeologist.

The project site is located in close proximity to the Catalina Foothills Estates, which was designed and developed by John and Helen Murphey and Josias Joesler, and the Binghamton Rural Historic Landscape. The proposed new construction should be evaluated to understand the potential impacts on the built environment. The new construction should respect the existing built environment of Catalina Foothills Estates. New construction should complement and be compatible with the buildings at 4419-4445 North Campbell designed by Joesler consistent with the directive provided in the design covenant for the area.



# PART IV Implementation & Administration



## A. Design Standards and Guidelines

Future design guidelines and standards prepared by the Developer prior to submittal of a Development Package will be representative of the overall intent of the River Terrace PAD and the Catalina Foothills Subregional Plan and will strive to ensure the creation of a cohesive mixed-use development. Additionally, the standards and guidelines will provide the framework for the design and character of the River Terrace Planned Area Development and address the following goals:

- a. A common theme and design elements will be established that will be used throughout the PAD. They will cover unifying site design elements, including streetscape design, signage, materials, colors and architectural styles and will be reviewed and approved by the Planning Director. Guidelines should be clear, concise and enforceable.
- b. Address adjacent development and provide for appropriate edge treatment along the perimeter of the property.
- c. Ensure new development does not adversely impact existing neighborhood character by complying with the goals and policies of the *Catalina Foothills Subregional Plan (CFSP)*
- d. Ensuring compatibility with existing Southwestern architectural styles and building materials of nearby land uses.
- e. Provide consistency with the PAD and the intentions of the document.

PAD design guidelines will be applied to the VC planning area where appropriate, and in some cases, the guidelines will require review by the River Terrace Design Review Board (RTDRB) and City of Tucson staff to ensure compatibility with surrounding land uses and the City's planning guidance. Due to the integration of uses promoted in the PAD, compatibility design for mixing residential and commercial land uses within the Village Court will be addressed.

The Developer will be responsible for establishing the RTDRB. The Board will consist of a minimum of five members responsible for review and approval of architectural styles, screen wall design, entry features, landscape plans, utility design and construction, and signage design. The RTDRB will have approval authority on these matters until such time that the property is entirely transferred from the Developer. Once the project is completed, control will be transferred to a future Owner's Association or management company.





## B. Interpretations and Amendments

### 1. Interpretation

The regulations and guidelines provided within this PAD supersede existing regulations within the City of Tucson (COT) Unified Development Code. If an issue arises regarding definitions, conditions, standards and/or situations not addressed in this PAD, those in the UDC or other COT regulations shall prevail, as interpreted by the COT Zoning Administrator.

### 2. Amendments

Amendments to this PAD may be necessary over time to respond to the changing market demands, or financial conditions, or to respond to the unanticipated needs of new users. Non-substantial changes to the PAD shall be approved pursuant to UDC Section 3.5.5.1 and include the following:

- a. Modifications to the permitted uses that do not change the overall intent of the PAD.
- b. Modifications to tax code parcel boundaries, including changes to interior boundaries or combining parcels, except that changes to the PAD perimeter boundary may not be considered a minor amendment or non-substantial change to the PAD.
- c. Modifications to the proposed PDP provided the Development Standards set forth in the PAD are maintained.
- d. Any other items not expressly defined as substantial based on UDC Section 3.5.5.1.

Substantial changes (as defined in UDC Section 3.5.5.1), are subject to the amendment application process outlined in UDC Section 3.5.5.1.2.



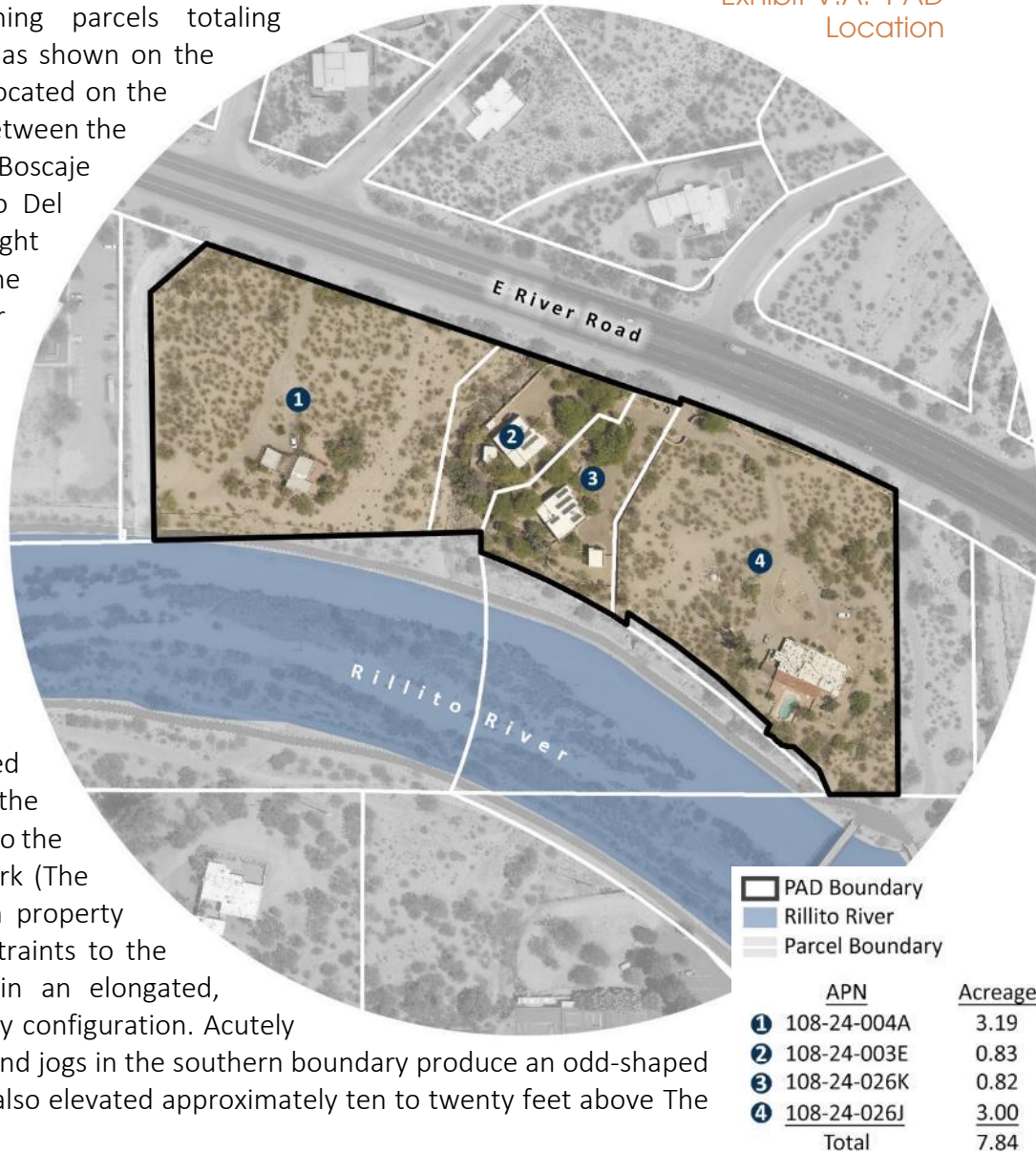
# PART V Site Analysis



## A. Significant Natural and Built Constraints

As demonstrated in *Exhibit V.A: PAD Location*, the property consists of four adjoining parcels totaling approximately 7.68 acres as shown on the following map. They are located on the south side of River Road between the terminus of E. Camino Boscaje Escondido and N. Camino Del Obispo approximately eight hundred feet east of the intersection of E. River Road and N. Hacienda Del Sol Road. The alignment of River Road, combined with the location of intersecting streets along the northern frontage, limits prospective driveway placement for the proposed project.

Exhibit V.A: PAD Location



The property is situated between River Road to the north and the Rillito River to the south. The Rillito River Park (The Loop) abuts the southern property boundary. The fixed constraints to the north and south result in an elongated, irregularly-shaped property configuration. Acutely angled property corners, and jogs in the southern boundary produce an odd-shaped property. The property is also elevated approximately ten to twenty feet above The Loop.

The western property boundary is adjacent to a channelized, unnamed wash conveying flows to the Rillito River from north of River Road. The eastern property boundary is adjacent to a Pima County-owned parcel containing a paved public access to The Loop along the Hacienda del Sol Wash. Drainage culverts installed under River Road have also caused an incised drainage area in the center of the property. The properties currently contain single-family homes, one on each parcel, and accessory structures.

Existing vegetation consists of upland desert scrub including, Creosote, brittlebush, Foothills Palo Verde, and Mesquite Trees and various cholla and prickly pear species. The vegetation surrounding the existing residences is consistent with manicured irrigated landscapes, native





vegetation, and low water use desert adapted trees. The overall vegetative density is medium to low density.

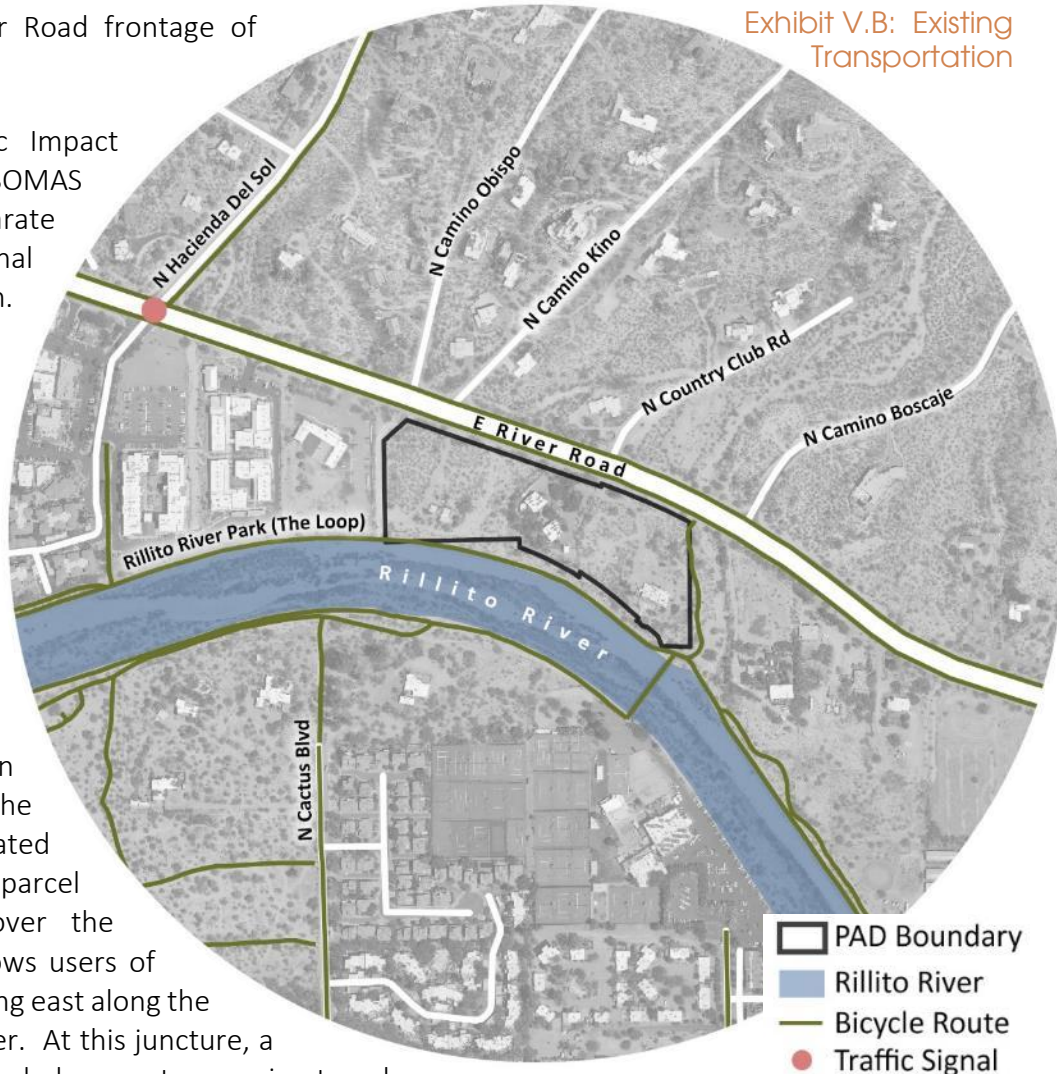
## B. Transportation and Circulation

East River Road runs along the northern edge of the property and is considered a scenic route. The right-of-way of East River Road is 150 feet along Parcels 1-3 but is only 140 feet along the Parcel 4 frontage, which means a 10-foot dedication will be needed along the River Road frontage of Parcel 4.

Section 2.1 of the Traffic Impact Analysis (TIA) prepared by PSOMAS and submitted under separate cover includes additional roadway information. Section 4.1.1 of the TIA includes a discussion of site circulation.

Adjacent to the south boundary of the property, The Loop provides access to over 100 miles of regional multi-use paths separated from roadway traffic. Connection to this amenity is made via an existing asphalt path along the Hacienda Del Sol Wash located on the Pima County-owned parcel to the east. A bridge over the Hacienda Del Sol Wash allows users of The Loop to continue traveling east along the north bank of the Rillito River. At this juncture, a bridge over the Rillito River helps create a major travel node for users of The Loop, particularly those south of the Rillito River. The bridge over the Rillito is one of the few crossings on the Rillito River segment of The Loop. The intersection of the two bridges provides access to an array of amenities and destinations including: the Tucson Racquet and Fitness Club, Rio Vista Natural Resource Park, Brandi Fenton Memorial Park, shopping, dining and hospitality in St. Philip's Plaza, nearby groceries (Trader Joe's) and medical facilities.

Exhibit V.B: Existing Transportation



## C. Existing Zoning

The property is currently zoned as follows, and a summary of current zoning is provided in *Table V.C.1: Existing Zoning and Land Uses*. Parcel 1 (APN: 108-24-004A) is zoned Suburban Ranch (SR) by the City of Tucson Unified Development Code (UDC). However, in 2016 the parcel was conditionally rezoned from SR to O-2 (Office Zone) per case number C9-16-02. No development associated with rezoning case C9-16-02 has occurred yet. Parcels 2 and 3 (APN: 108-24-003E and 108-24-026K) are zoned CR-1 (Single Residence), and Parcel 4 (APN: 108-24-026J) is zoned Suburban Ranch (SR) in Pima County. Parcels 2-4 will be annexed into the City of Tucson and given translational zoning before River Terrace PAD is considered for approval by Mayor and Council.

Zoning for the surrounding properties within 150 is listed below in *Table V.C.2: Surrounding Zoning*.

Table V.C.1: Existing Zoning and Land Uses

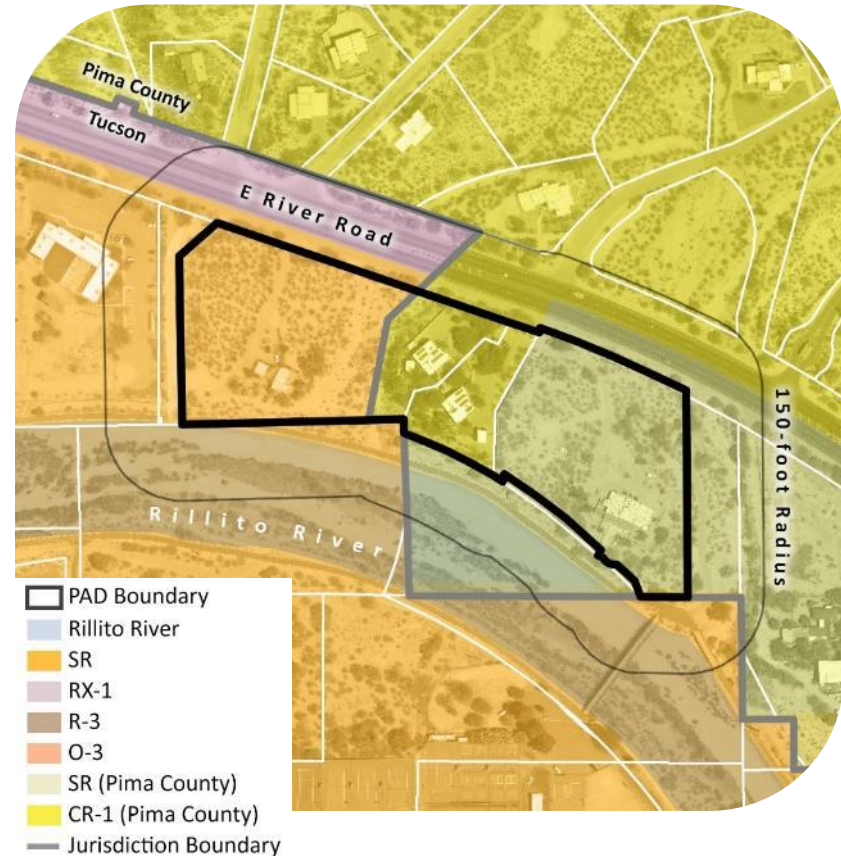
Assessor Parcel Number	Zone	Land Use
Parcel 1: 108-24-004A	SR (Suburban Ranch – City of Tucson) / O-2 (Office)	Single-Family Residence
Parcel 2: 108-24-003E	CR-1 (Single Residence Zone – Pima County)	Single-Family Residence
Parcel 3: 108-24-026K	CR-1 (Single Residence Zone – Pima County)	Single-Family Residence
Parcel 4: 108-24-026J	SR (Suburban Ranch – Pima County)	Single-Family Residence

Table V.C.2: Surrounding Zoning

Direction	Zone
North	CR-1 (Single Residence - PC), RX-1 (Residence Zone - CoT )
South	SR (Suburban Ranch – CoT) , SR (Suburban Ranch – PC)
East	SR (Suburban Ranch – PC), CR-1 (Single Residence – PC)
West	SR (Suburban Ranch - CoT)

Note: CoT = City of Tucson, PC = Pima County

Exhibit V.C: Existing Zoning





## D. Adjacent Parcels and Structures

Existing Land uses on adjacent parcels and structures within 150 feet of the properties are listed below in *Table V.D: Existing Land Uses for Adjacent Parcels*.

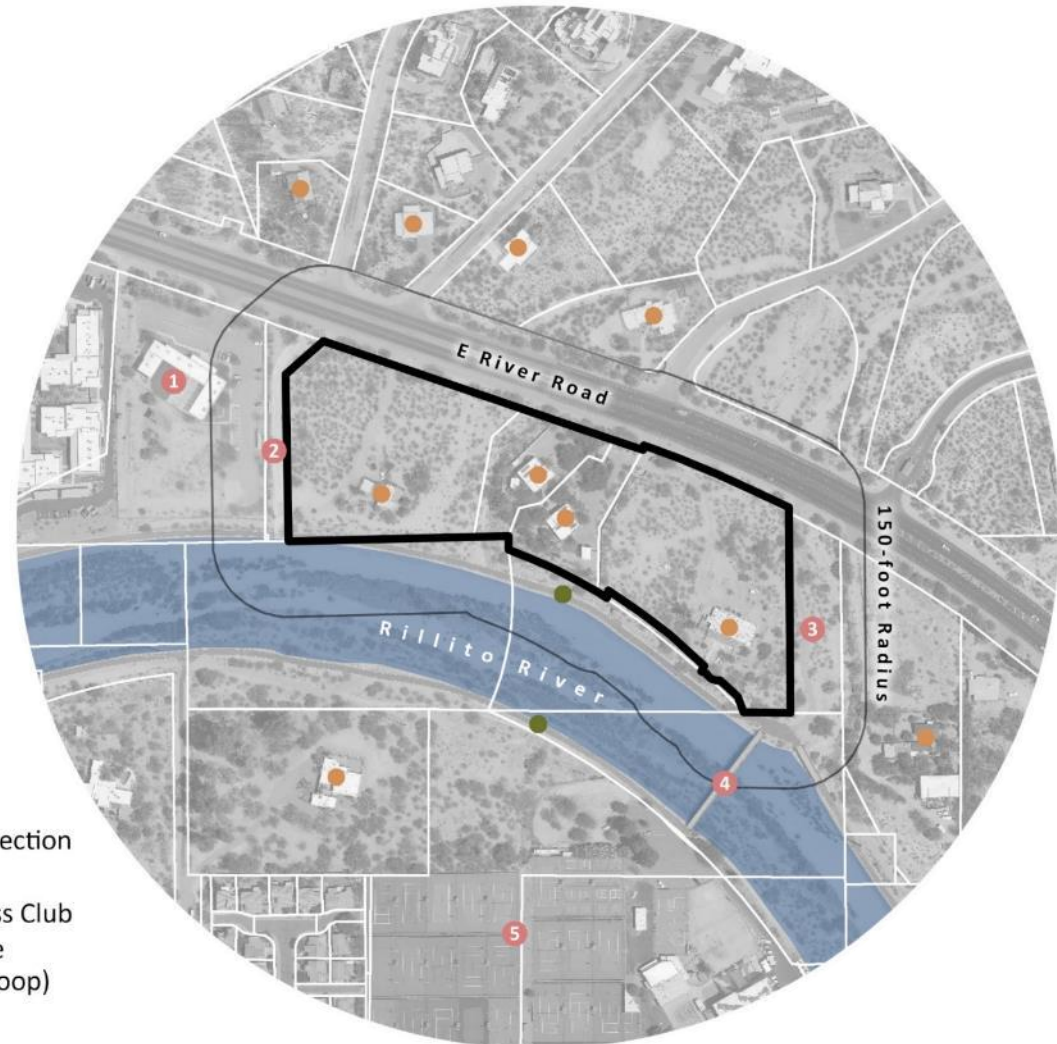
Table V.D: Existing Land Uses for Adjacent Parcels

Direction	Property Use
North	One and Two-Story Single-Family Residential, Vacant lot
South	Rillito River, Rillito River Park (The Loop)
East	Hacienda Del Sol Wash trail connection, Single-Family Residence
West	Single-Story Private School



- PAD Boundary
- Rillito River
- 1 Al-Huda Islamic School
- 2 Drainage Channel
- 3 Pima County Trail Connection
- 4 Pedestrian Bridge
- 5 Tucson Raquet & Fitness Club
- Single Family Residence
- Rillito River Park (The Loop)

Exhibit V.D: Surrounding Infrastructure and Development

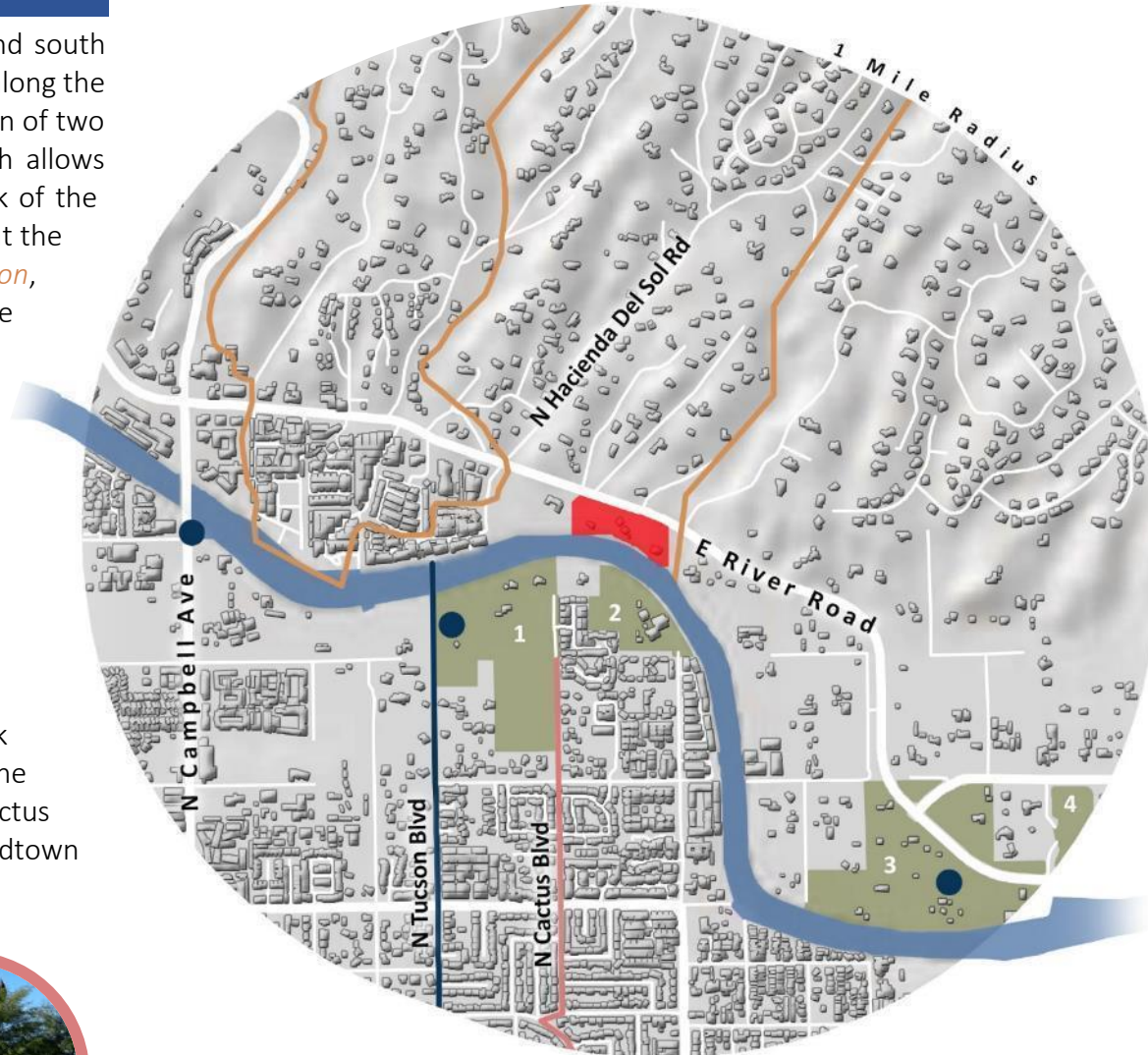




## E. Parks, Recreation and Open Space

The Rillito River Park (The Loop) runs along the north and south banks of the Rillito River south of the property. A section along the Hacienda Del Sol Wash connects River Road to the junction of two multi-use bridges. A bridge over Hacienda Del Sol Wash allows users of The Loop to continue east along the north bank of the Rillito River since the south bank of The Loop terminates at the bridge over the Rillito. As depicted in *Exhibit V.E: Recreation*, multiple recreational facilities are nearby and can be accessed directly from The Loop, providing a variety of activities for all ages. These include Brandie Fenton Memorial Park and the Jewish Community Center to the east; the Rio Vista Natural Resource Park to the southwest; and the Tucson Racquet and Fitness Club to the south.

Along with The Loop trail network, other pedestrian, cycling and trail facilities in the area expand River Terrace’s recreational options and connectivity. The Campbell/Camino Real and Hacienda Del Sol singletrack trails traverse the Catalina Foothills to the north. To the south, Tucson Boulevard’s enhanced corridor and Cactus Boulevard’s bicycle boulevard connect the property to Midtown and University of Arizona facilities.



- PAD Boundary
- Rillito River Park
- 1 Rio Vista Natural Resource Park
- 2 Tucson Raquet & Fitness Club
- 3 Brandie Fenton Memorial Park
- 4 Tucson Jewish Community Center
- Enhanced Corridor
- Bike Boulevard
- Singletrack Trail
- Trailhead



## F. Public, Educational, Community and Cultural Facilities

The property is located within the Tucson Unified School District. As indicated on *Exhibit V.F: Community Facilities*, three schools are located within one mile of the property, one private and two charter. The main district office for the Catalina Foothills School District is located to the west at 2101 East River Road.

The private school is Al-Huda Islamic School, which is immediately west of the property. The two charter schools are south and west of the property, Tucson Waldorf School-River Bend and Khalsa, respectively. Both schools offer K-8 schooling as well as early childhood care.

The Jewish Community Center features recreational amenities and programming open to the public and hosts a range of arts and cultural events. Rio Vista Natural Resource Park pays homage to Tucson’s Desert Southwest heritage while St. Philip’s Plaza provides boutique shopping and dining in a setting rich with culture and history.



- PAD Boundary
- Rillito River
- 1 UofA Campus Agriculture Center
- 2 Tucson Jewish Community Center
- 1 Catalina Foothills Community Schools (Public)
- 2 Al-Huda Islamic School (Private)
- 3 Tucson Waldorf School-River Bend (Charter)
- 4 Khalsa School (Charter)





## G. Existing Drainage

The project site lies at the confluence of the foothills watersheds with the Rillito Creek floodplain on the downstream (south) side of River Road. The significance of this location is that the site would typically be impacted by both off-site (Foothills Watersheds) and the Rillito Creek; however, the site itself sits on a bluff significantly above the Rillito Creek floodplain and has a soil cemented bank with River Park infrastructure to protect the site from lateral migration. The site itself is elevated above the River Park with three channels conveying off-site flow either on the boundary or through the site. See *Exhibit V.G.1: 100-year Floodplain and Erosion Hazard Setbacks*.

The site lies outside the FEMA 100-year (1% chance) floodplain, and only small portions are in a designated Shaded Zone X (500-year floodplain) per FEMA FIRM No. 04019C1695L. See *Exhibit: V.G.2: FEMA FIRM*.

Wash 1 drains along the west boundary of the property and is a fully lined concrete channel. The flow generated by Offsite Watershed 1 is completely contained in this channel and has zero impact on the site, as shown in *Exhibit V.G.1*. See *Exhibit V.G.3: Watershed Map*.

Wash 3 drains through the middle of the property in a natural entrenched channel and is not designated as a W.A.S.H., ERZ, or as a riparian area. The flow generated by Offsite Watershed 3 is not regulatory as it enters the site, but with on-site contribution, it is close to 100 cfs, so we mapped it as a regulatory floodplain.

Wash 5 (Hacienda Del Sol Wash) drains along the east boundary of the site, completely outside of the property boundary. This wash

is mostly natural with existing rip-rap on the west bank which serves to mitigate any erosion on the project site. See *Exhibit V.G.3: Watershed Map* and *Exhibit V.G.1: 100-year Floodplain and Erosion Hazard Setbacks*. Wash 5 is designated as Riparian Habitat, but neither the TSMS or Shaw Riparian Habitat overlays falls within the project site.

The above described washes are all subject to the City Floodplain Ordinance, See *Exhibit V.G.1 & V.G.3* for 100-year discharge; however, none of them are subject to W.A.S.H. or ERZ ordinances.

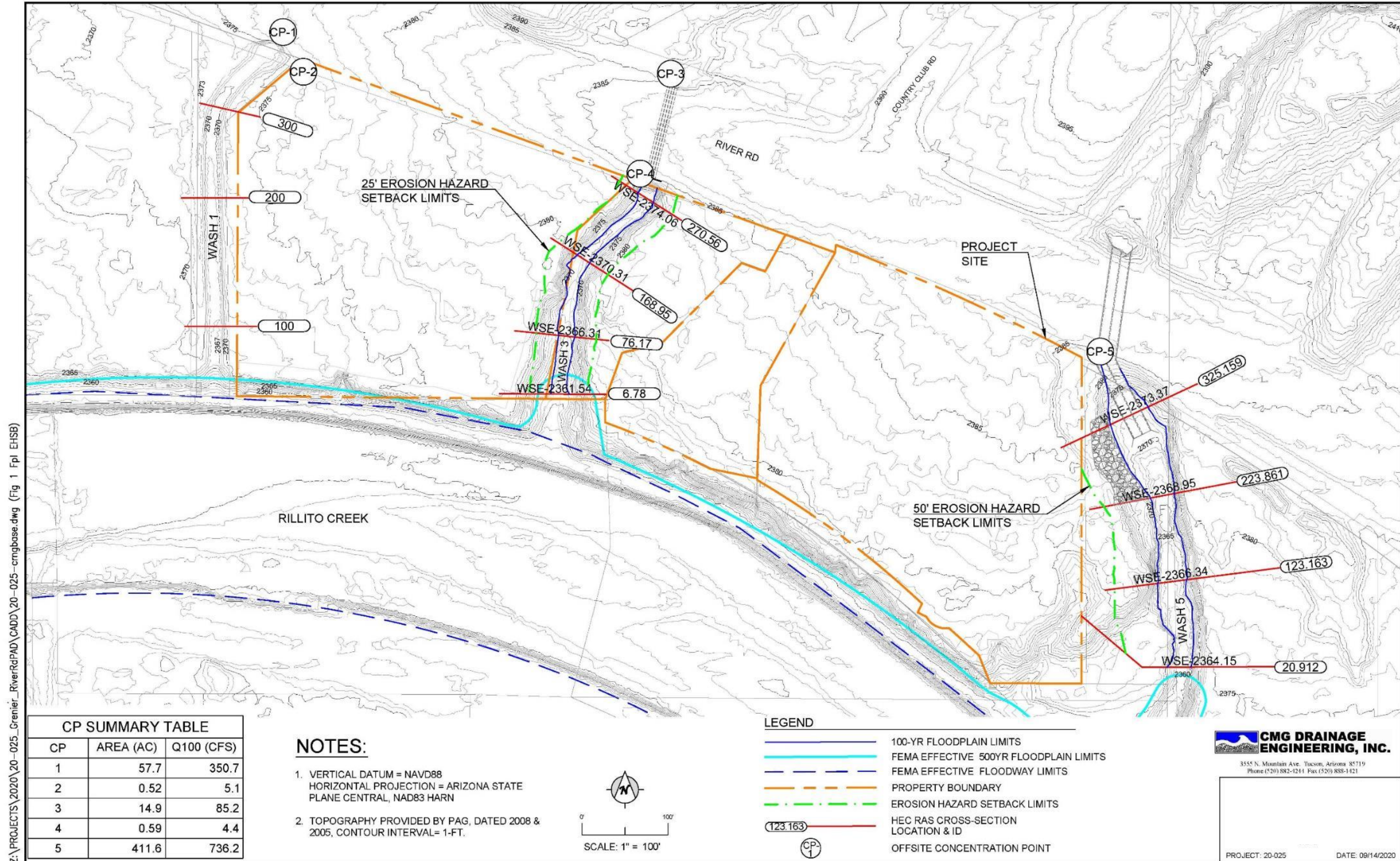
The site itself was delineated into seven (7) on-site sub-watersheds labeled A-G. Sub-watershed C is the only on-site feature that is not sheet flow. Flow from C is a contributor to Wash 3. See *Exhibit V.G.4: Existing Drainage Conditions*.



*Photo of Wash 3*







Z:\PROJECTS\2020\20-025\_Grenier\_RiverRdPAD\CADD\20-025-cmgbase.dwg (Fig 1 Fpi EHSB)





Z:\PROJECTS\2020\20-025\_Grenier\_RiverTerrPad\CADD\20-025-cmgbase.dwg (Fig 2 FEMA FIRM)



**LEGEND**

SPERM FLOOD ZONE AREAS SUBJECT TO INUNDATION BY THE 2% ANNUAL CHANCE FLOOD

The 1% and 2% Flood Zones are shown on the base map. The 1% Flood Zone is the area which has a 1% chance of being equalled or exceeded in any given year. The 2% Flood Zone is the area which has a 2% chance of being equalled or exceeded in any given year. The base flood elevation is the elevation of the 2% annual chance flood.

**ZONE A**  
Special Flood Hazard Area subject to inundation by the 1% annual chance flood.

**ZONE X**  
Areas subject to flooding by the 1% annual chance flood with average depths of one foot or less. Areas with average depths of one foot or less are shown in light blue. Areas with average depths of more than one foot are shown in medium blue.

**OTHER AREAS**  
Areas shown to be subject to the 2% annual chance flood with average depths of one foot or less. Areas with average depths of one foot or less are shown in light blue. Areas with average depths of more than one foot are shown in medium blue.

**COASTAL AND OTHER SPECIAL AREAS (OAS)**  
OTHER SPECIAL AREAS (OAS)

OAS areas and OAS are normally located within or adjacent to Special Flood Hazard Areas.

1% Annual Chance Flood Boundary  
2% Annual Chance Flood Boundary  
Floodway Boundary  
Zone A Boundary  
Zone X Boundary  
Boundary of Special Flood Hazard Area and Special Flood Hazard Area  
Limits of Floodway (See Note 1)

PANEL 1695L

**FIRM**  
FLOOD INSURANCE RATE MAP

PIMA COUNTY,  
ARIZONA  
AND INCORPORATED AREAS

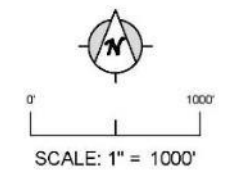
PANEL 1695 OF 4750  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

DATE OF MAP: 2011  
DATE OF REVISION: 2011

MAP NUMBER  
04019C1695L

MAP REVISED  
JUNE 16, 2011

Federal Emergency Management Agency

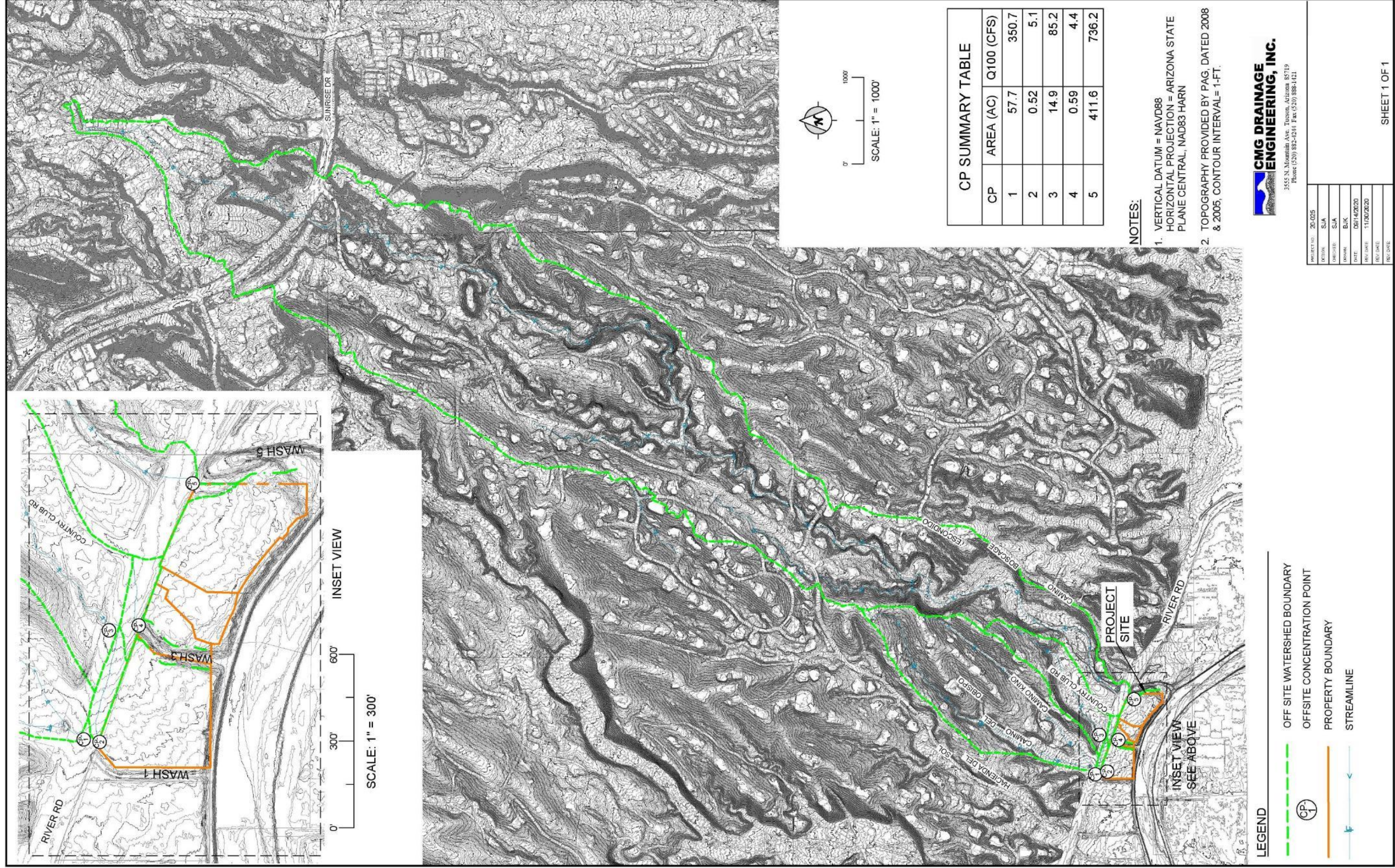


**CMG DRAINAGE ENGINEERING, INC.**  
3555 N. Mountain Ave. Tucson, Arizona 85719  
Phone (520) 882-1214 Fax (520) 888-1421

SHEET 1 OF 1



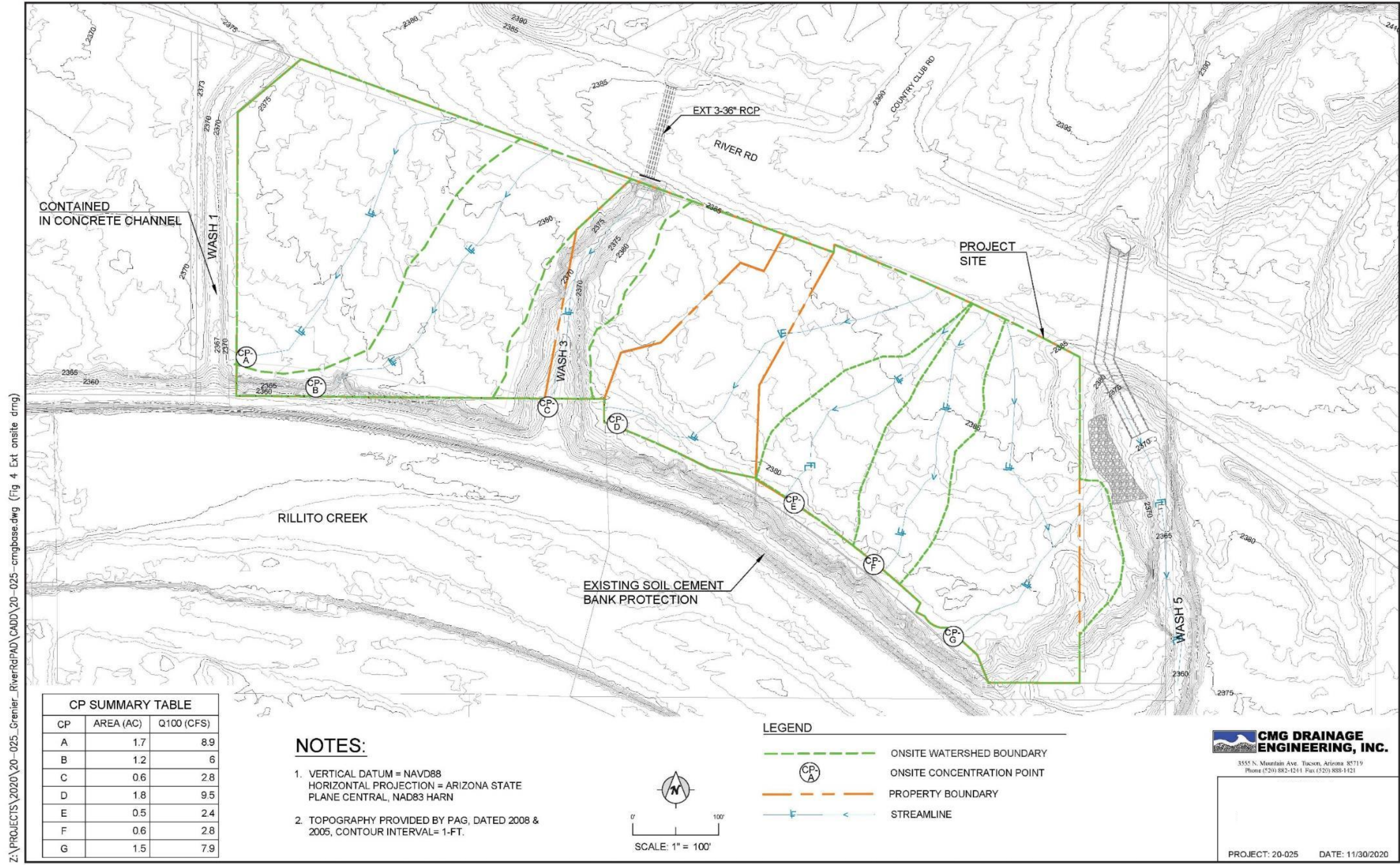




Z:\PROJECTS\2020\20-025\_Grenier\_RiverRdPAD\CADD\20-025-cmgbase.dwg (Fig 3 WSHD OFF) Plotted Nov 30, 2020 at 11:17am by Brenda



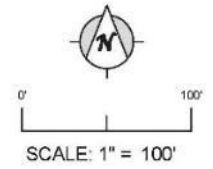




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CP SUMMARY TABLE		
CP	AREA (AC)	Q100 (CFS)
A	1.7	8.9
B	1.2	6
C	0.6	2.8
D	1.8	9.5
E	0.5	2.4
F	0.6	2.8
G	1.5	7.9

- NOTES:**
1. VERTICAL DATUM = NAVD88  
HORIZONTAL PROJECTION = ARIZONA STATE PLANE CENTRAL, NAD83 HARN
  2. TOPOGRAPHY PROVIDED BY PAG, DATED 2008 & 2005, CONTOUR INTERVAL= 1-FT.



- LEGEND**
- ONSITE WATERSHED BOUNDARY
  - CP-A ONSITE CONCENTRATION POINT
  - PROPERTY BOUNDARY
  - STREAMLINE

**CMG DRAINAGE ENGINEERING, INC.**  
 3555 N. Mountain Ave. Tucson, Arizona 85719  
 Phone (520) 882-1241 Fax (520) 888-1421

PROJECT: 20-025 DATE: 11/30/2020





## H. City of Tucson Ordinances

The property is affected by the designation of River Road as a Scenic Arterial Street by the Major Streets and Routes (MS&R) Ordinance. This ordinance specifies that all property within 400 feet of River Road is subject to the Scenic Corridor Zone (SCZ). The property lies entirely within this 400-foot overlay area. The MS&R identifies River Road as having an ultimate right-of-way width of 150 feet. A 30-foot natural buffer is required adjacent to the future right-of-way line. Structure heights are also limited to 24 feet for residential buildings and 30 feet for non-residential buildings per the SCZ.

## I. Inventory of Existing Structures, Roads, and Other Development

The property consists of four separate parcels, each containing one single-family home; three of the parcels have small storage sheds. The three eastern parcels have an approximately five-foot tall masonry screen wall adjacent to River Road extending the length of properties. The wall also extends approximately 120 feet south along the incised channel at the center of the property.

East River Road, a five-lane major local road, is adjacent to the northern property boundary. Four minor local roads: East Camino Del Obispo, North Country Club Road, North Camino Kino and East Camino Boscaje Escondido intersect the north side of River Road near the property. The property has three existing access points on River Road

Existing structures in the immediate area consist of a private school to the west, one and two-story homes to the north and east, and the Tucson Racquet and Fitness Club to the south on the opposite bank of the Rillito River.

## J. Existing Provisions for Stormwater Drainage and Utilities

Existing provisions for stormwater drainage include the three channels that drain off-site flow around or through the site; these also receive some of the on-site sheet flow. See *V.G.4: Existing Drainage Conditions*. In addition to the channels, there are some downchutes on the south end of the property originally placed to collect flow at top of terrace and drain to the Rillito Creek. Downchutes are pipes at severe angles that collect flow at top and convey in a pipe to a lower level. These downchutes have not operated well and/or failed. These downchutes should not be part of the proposed drainage solution. See picture below.



The Pima County Regional Flood Control District (District) is also in the process of improving the upper terrace with slope improvements to mitigate the ongoing erosion. They will have a crown ditch at the top of their slope to accommodate flow from the site. This District improvement will be an existing condition by the time the project commences design.

### 1. Sewer

The existing sewer network is shown on *Exhibit V.J.1.a*. An existing 36-inch public sewer line traverses the site from River Road and continues running west along the Rillito River. There are four existing manholes on property and two manholes just south of the property accessing the sewer line. The existing infrastructure provides existing sewer connections on-site and eliminates the need to construct new sewer lines in public roadways, affecting traffic and the community during construction.

Per the Pima County Regional Wastewater Reclamation Department (RWRD), the property is tributary to the Tres Rios Wastewater Reclamation Facility via the North Rillito Interceptor. Capacity is currently available for the proposed project in the public sewer G-80-073, downstream from manhole 5293-02. Refer to *Exhibit V.J.1.b: Pima County RWRD Wastewater Capacity Letter*.

Exhibit V.J.1.a: Sewer Network

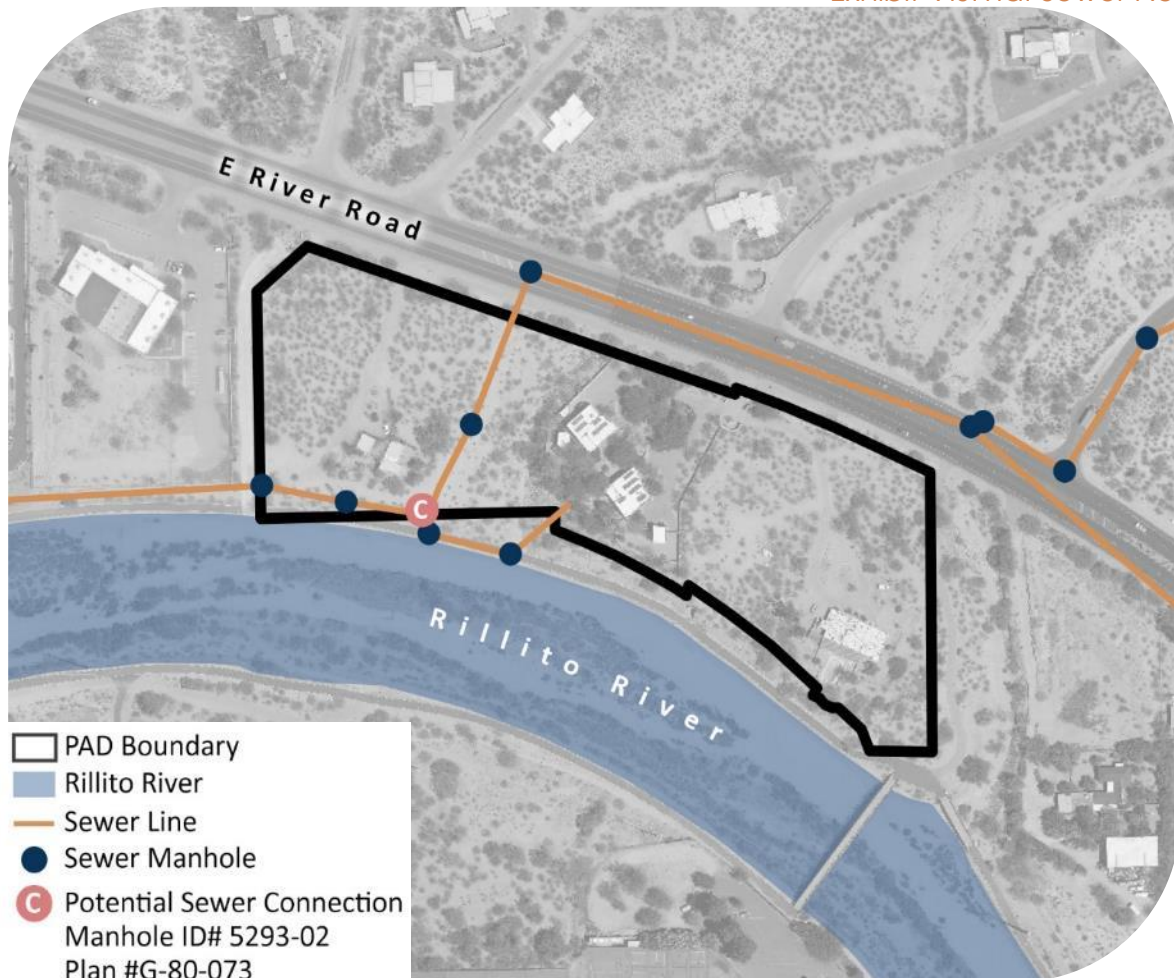




Exhibit V.J.1.b: Pima County RWRD Wastewater Capacity Letter



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

JACKSON JENKINS  
DIRECTOR

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

July 24, 2020

Adam Call  
The Planning Center  
2 E Congress Street, Suite 600  
Tucson, Arizona 85701

**Sewerage Capacity Investigation No. P20WC00130 Type I**

**RE: Type I: 2850 E River Road Rezoning, Parcel 10824003E, 10824004A, 10824026J, 10824026K  
Estimated Flow 32,805 gpd (ADWF).**

Greetings:

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

Capacity is currently available for a project this size in the public sewer G-80-073, downstream from manhole 5293-02

This letter is not a reservation or commitment of treatment or conveyance capacity for this project. It is not an approval of point and method of connection. It is an analysis of the system as of this date. Allocation of capacity is made by the Type III Capacity Response.

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

Reviewed by: Olivia Cañez, EPT Sr.



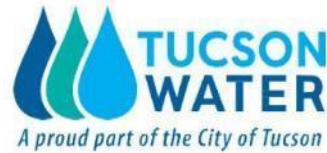
## 2. Electric

The property is within Tucson Electric Power's (TEP's) service area and is currently served by TEP.

## 3. Water

The property is within Tucson Water's Obligated Service Area and is currently served by Tucson Water. Tucson Water has indicated that there is an assured water supply (AWS) from the State of Arizona Department of Water Resources (ADWR) and water service will be provided to River Terrace upon completion and approval of a water service application (see *Exhibit V.J.3: Tucson Water Letter*).





July 22, 2020

The Planning Center  
2 E. Congress St. Suite 600  
Tucson, AZ 85701

Attn: Adam Call

**SUBJECT: Water Availability for Project: 2800-3000 Block of E. River Rd., APN: 10824004A,003E,026K & J, Case #WA3187, T-13 R-14 S-20, Lots: 9999, Location Code: UNI, Total Area: 7.86, Zoning: CR-1, SR**

**WATER SUPPLY**

Tucson Water will provide water service to this project based on the subject zoning of the above parcels. Tucson Water has an assured water supply (AWS) designated from the State of Arizona Department of Water Resources (ADWR). An AWS designation means Tucson Water has met the criteria established by ADWR for demonstration of a 100-year water supply - it does not mean that water service is currently available to the subject project.

**WATER SERVICE**

The approval of water meter applications is subject to the current availability of water service at the time an application is received. The developer shall be required to submit a water master plan identifying, but not limited to: 1) Water Use; 2) Fire Flow Requirements; 3) Offsite/Onsite Water Facilities; 4) Loops and Proposed Connection Points to Existing Water System; and 5) Easements/Common Areas.

Any specific area plan fees, protected main/facility fees and/or other needed facilities' cost, are to be paid by the developer. *If the existing water system is not capable of meeting the requirements of the proposed development, the developer shall be financially responsible for modifying or enhancing the existing water system to meet those needs.*




*This letter shall be null and void two years from the date of issuance.*

**Issuance of this letter is not to be construed as agency approval of a water plan or as containing construction review comments relative to conflicts with existing water lines and the proposed development.**

If you have any questions, please call New Development at 791-4718.

Michael Mourreale, P.E.  
Engineering Manager  
Tucson Water Department

MM:ka  
cc: 10824004A, 003E, 026K & J.- WAL parcels

P.O. Box 27210 • Tucson, AZ 85726-7210  
520.791.4718 • [tucsonaz.gov/water](http://tucsonaz.gov/water)   





## K. Inventory of Existing Public Services

### 1. Police

The property is located within the Tucson Police Department's Midtown Patrol Sector 1. The Midtown substation is located approximately 6 miles to the south on Alvernon Way and 22nd Street.

### 2. Fire

Tucson Fire's Station #20 is located on 1st Avenue and River Road, approximately two miles to the west.

### 3. Library

Pima County's Woods Memorial Library is the nearest public library. It is located approximately three miles away to the southwest on 1st Avenue and Prince Road.

## L. Hydrology and Water Resources

Refer to Section II.G: Existing Drainage.



## M. Topography and Slope

As shown in *Exhibit V.M: Existing Topography and Slope*, the property generally slopes from the north to the south. The northeast corner of the property has an approximate elevation of 2,384 feet. The southwest and southeast corners of the property have an approximate elevation of 2,371 feet and 2,368 feet, respectively. There is a fifteen to twenty-foot deep drainage channel (Wash 3), with unimproved banks bisecting Parcels 1 and 2. The banks of this channel slope are greater than fifteen percent. The terrain slopes down rapidly along the entire south boundary until it meets The Loop. In the southwest corner of the property, The Loop's paved shared-use path is approximately twelve to fourteen feet lower in elevation than the top of the slope. It is approximately eighteen feet lower along much of the south boundary before again tapering down to a twelve to fourteen foot change in elevation at the southeast corner. In August of 2020, Pima County began constructing retaining walls to stabilize the slope and control erosion.

There are no rock outcroppings or other significant topographic features on the property.

The average cross slope of the parcel is 7.1%, as calculated by performing the following calculation:

$$\text{ACS} = \frac{I \times L \times 0.0023}{A}$$

Interval (I) = 2'

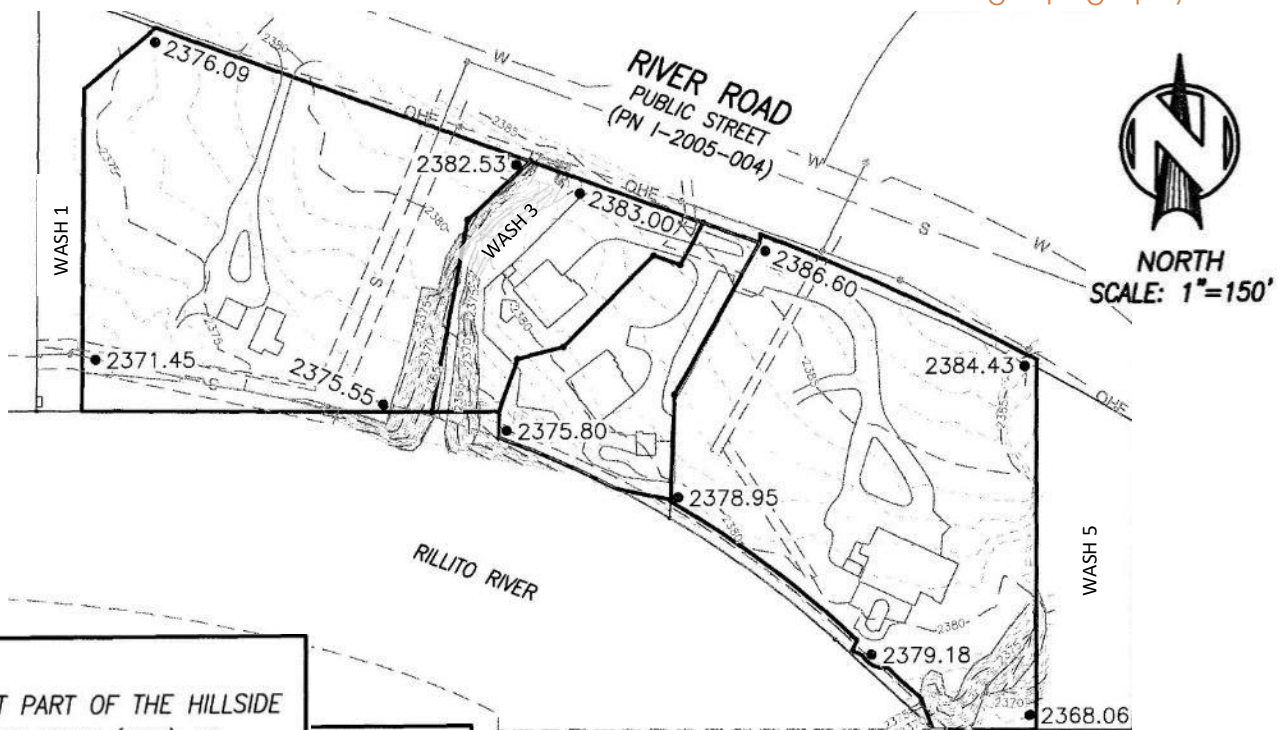
Total length of contours (L) = 11,936 feet

Area (A) = 7.68 acres

$$\text{ACS} = \frac{2 \times 11,936 \times 0.0023}{7.68 \text{ acres}}$$

ACS = 7.1

Exhibit V.M: Existing Topography and Slope



**NOTE:**

SITE IS NOT PART OF THE HILLSIDE DEVELOPMENT ZONE (HDZ) AS REFLECTED IN THE CITY OF TUCSON HILLSIDE DEVELOPMENT ZONE MAPS.



## N. Vegetation and Wildlife

Existing vegetation consists of upland desert scrub including, creosote, brittlebush, Foothills palo verde and mesquite trees along with various cholla and prickly pear species (refer to *Exhibit II.N: Vegetative Communities*). The vegetation surrounding the existing residences is consistent with manicured landscapes utilizing irrigation and is comprised of native vegetation and low water use desert adaptive trees. The overall vegetative density is medium to low density, and the southern portion of the PAD is designated IRA-H by Pima County.

According to the Arizona Game and Fish Department (AZGFD), the property lies within a wildlife movement area located in a Riparian/Wash Zone of the Rillito River. A list of threatened or endangered species within three miles of the property is provided below.

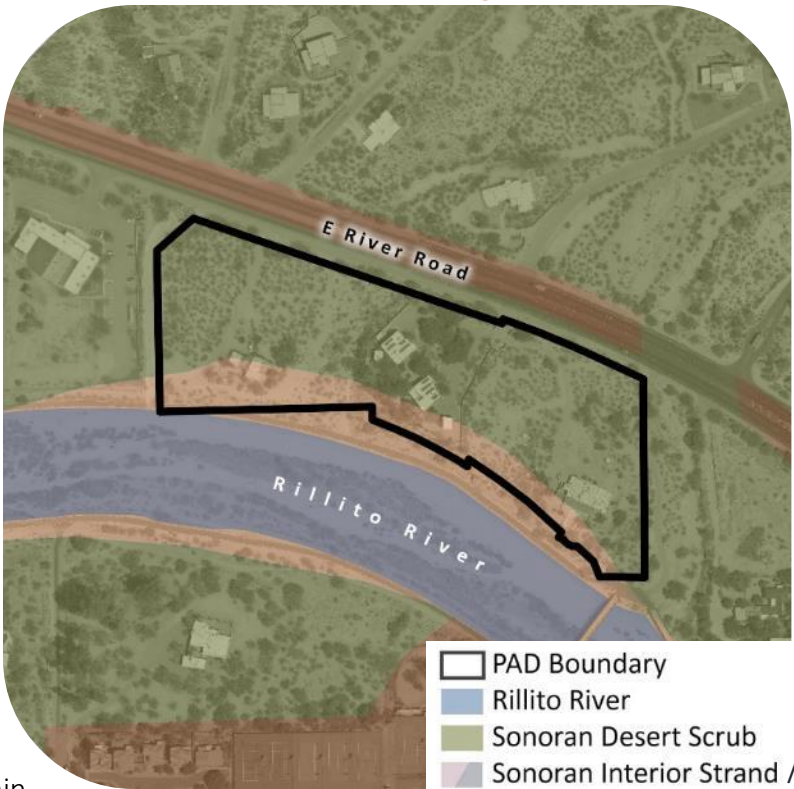


Table V.N: AZGFD Special Status Species Documented within 3 Miles

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Bat Colony						
<i>Choeronycteris mexicana</i>	Mexican Long-tongued Bat	SC	S	S		1C
<i>Glaucidium brasilianum cactorum</i>	Cactus Ferruginous Pygmy-owl	SC	S	S		1B
<i>Gopherus morafkai</i>	Sonoran Desert Tortoise	CCA	S	S		1A
<i>Heloderma suspectum suspectum</i>	Reticulate Gila Monster					1A
<i>Heloderma suspectum</i>	Gila Monster					1A
<i>Leptonycteris yerbabuenae</i>	Lesser Long-nosed Bat	SC				1A
<i>Lithobates yavapaiensis</i>	Lowland Leopard Frog	SC	S	S		1A
<i>Macrotus californicus</i>	California Leaf-nosed Bat	SC		S		1B
<i>Mammillaria thornberi</i>	Thornber Fishhook Cactus				SR	
<i>Myotis occultus</i>	Arizona Myotis	SC		S		1B
<i>Peucaea carpalis</i>	Rufous-winged Sparrow					1B
<i>Tadarida brasiliensis</i>	Brazilian Free-tailed Bat					1B
<i>Thamnophis eques megalops</i>	Northern Mexican Gartersnake	LT	S			1A
<i>Tumamoca macdougallii</i>	Tumamoc Globeberry		S	S	SR	

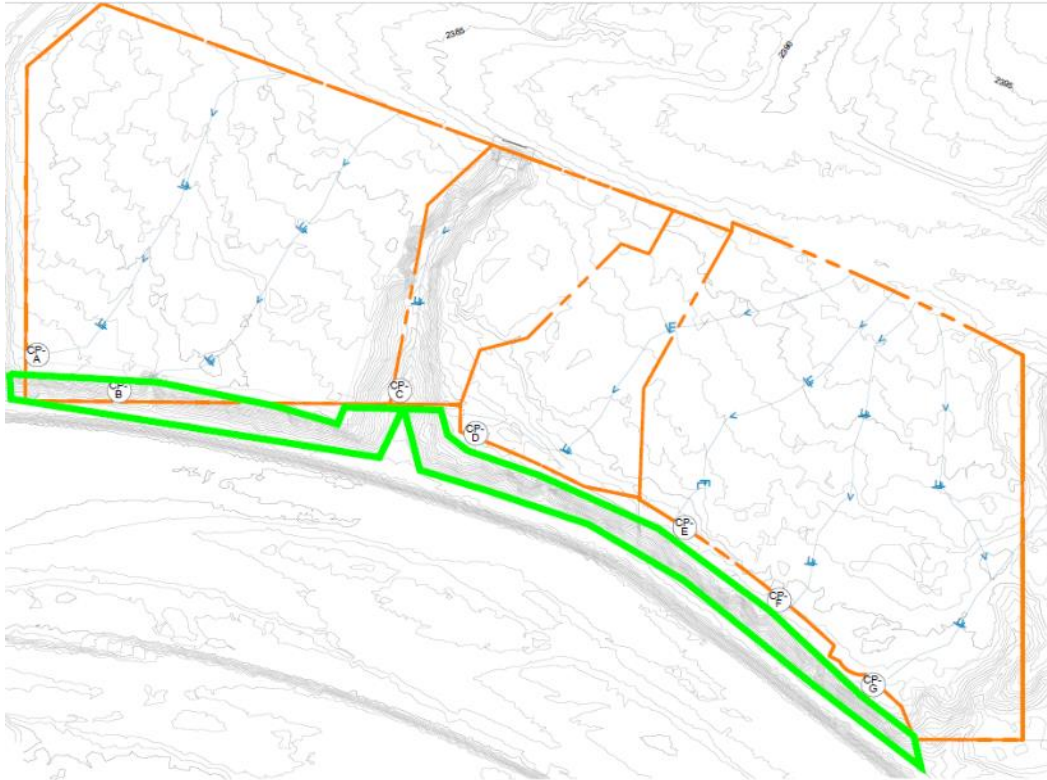
Note: Status code definitions can be found at <https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/>





## O. Geology and Soils

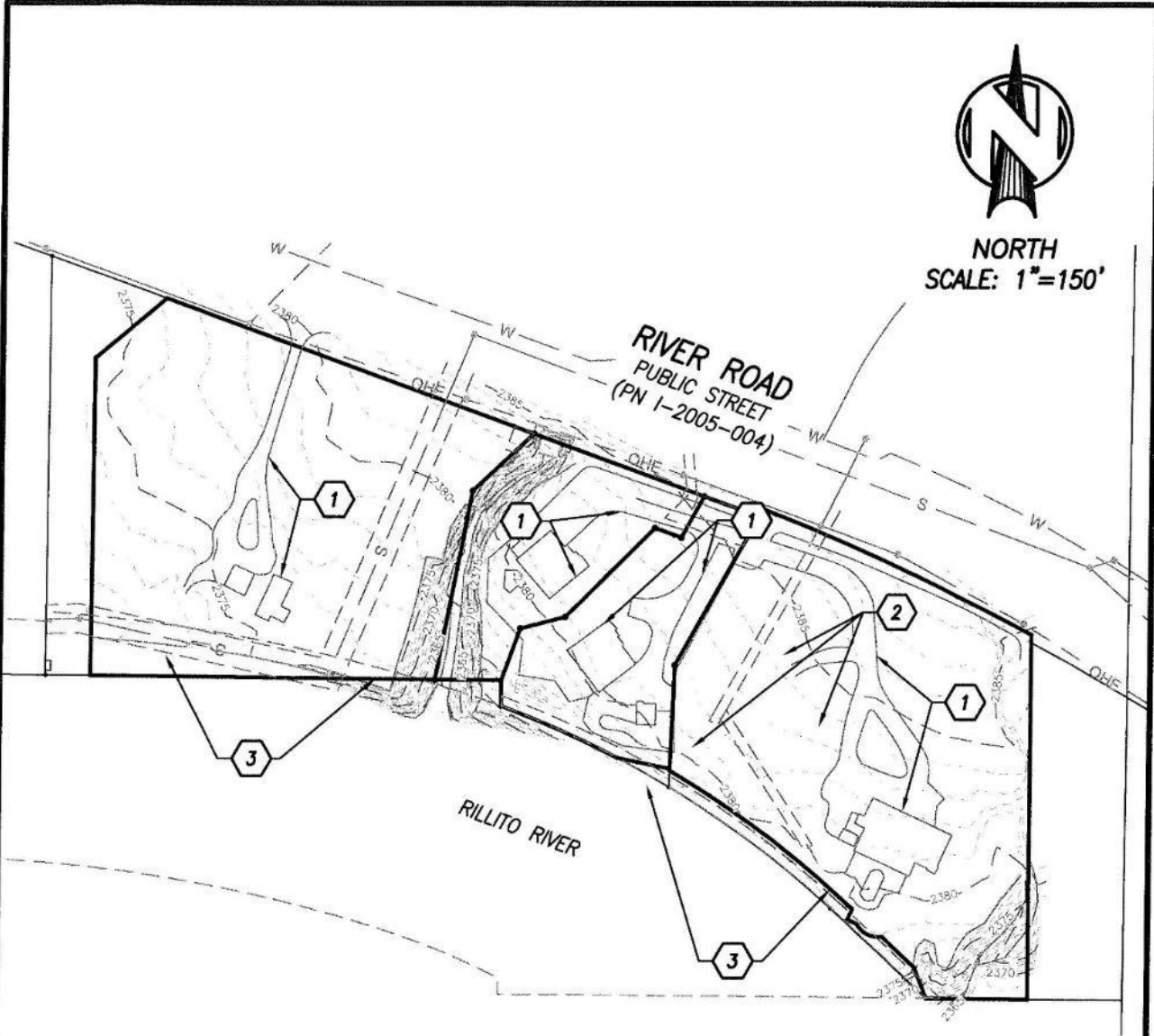
The area in the green boundary below is an area mapped based on observation and engineering experience as poor-quality soils subject to erosion. There is ongoing rilling and headcutting due to site drainage spilling over and down the slope. This erosion is not due to the Rillito Creek, only due to site drainage.



As previously stated, the Pima County Regional Flood Control District has an improvement project in the works that will become an existing condition which will mitigate much of the up-slope area that is susceptible to erosion.

See *Exhibit V.O: Existing Geology and Soils*.





**KEYNOTES**

- 1 GRADED AREAS FOR EXISTING RESIDENTIAL STRUCTURES AND DRIVEWAYS
- 2 MISCELLANEOUS DEBRIS PILES
- 3 EVIDENCE OF POOR QUALITY SOIL SUBJECT TO EROSION



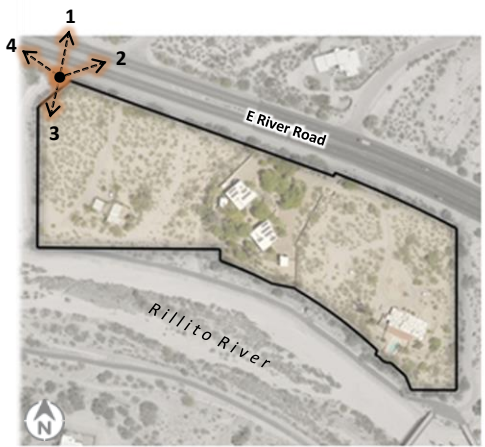


## P. Viewsheds and Visual Analysis

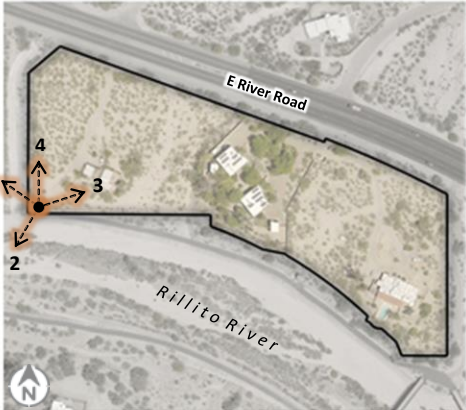
The property has views of the Santa Catalina Mountains to the north and Midtown and Downtown Tucson to the south. The change in elevation to the south allows a better vantage of Tucson's urban landscape than those of lower lying areas across the Rillito River. From River Road the property blends in with the surrounding properties. Residents to the north in the Cataline Foothills are at a higher elevation than the subject property and are able to maintain their views of Tucson and the mountains to the south.

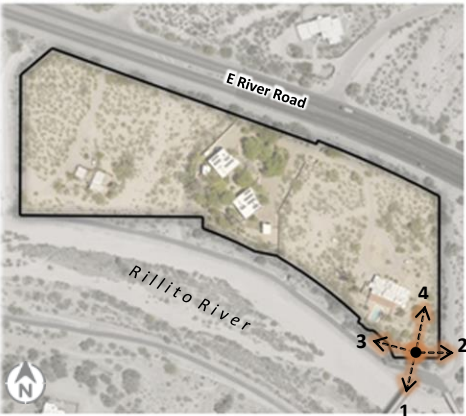
Photos of the site are in the exhibit below. Refer to *Exhibit V.P: Site Photos*.





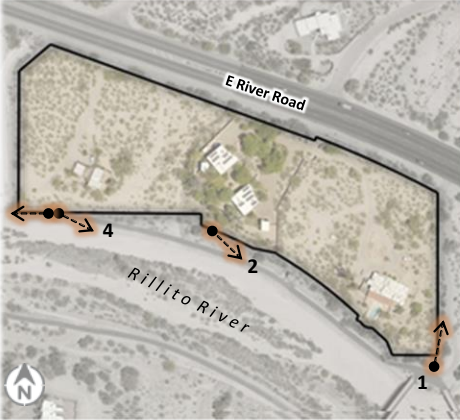














## Q. Archaeological and Historical Sites

### 1. Archaeological Records Check

According to a record search performed by SWCA Environmental Consultants (SWCA), 40 archaeological survey projects were conducted within a one-mile radius of the project area between 1981 and 2013; each of which were conducted in support of residential, commercial, and school development, road improvements, potable water and wastewater pipelines, cellular communications towers, and riverbank stabilization and public use paths. Three surveys have slightly overlapped with the four parcels. These surveys were conducted between 1989 and 2003.

One survey, conducted in 1989 for proposed Rillito Creek bank stabilization project, slightly overlapped with the southeast corner of Parcel 4 (APN: 108-24-026J). A survey conducted in 1998 for water main improvements slightly overlapped with the northeast corner of Parcel 1 (APN: 108-24-004A). Finally, one survey conducted in 2003 for proposed River Road improvements partially overlapped with the northern portion of all four parcels. Overall, approximately 1.13 acres (14 percent) of the project parcels have been surveyed.

Fourteen archaeological sites have been identified within one-mile of the subject parcels, one site (AZ BB:9:18[ASM]) is adjacent to and may partially extend into the southeast corner of Parcel 108-24-026J. AZ BB:9:18(ASM) was originally recorded in 1938 as a prehistoric artifact scatter. An archaeological testing program was conducted at the site in 1990 prior to a channel stabilization project along Rillito Creek.

The testing program included surface collection of artifacts, backhoe trenching, hand excavation of a test pit, backdirt screening, site stratigraphy mapping, and creating a site plan view map. The backhoe trenching identified two prehistoric features (a charcoal-filled pit and a pit house) and one historic-era trash midden. Over 360 artifacts were collected and analyzed from the site, and the decorated ceramics collected suggests a Hohokam Colonial period occupation. The site was determined eligible for listing by the State Historic Preservation Office. The other 13 sites consist of eight Native American sites, consisting of artifact scatters, three historic-era sites, consisting of residential buildings and associated features, and two sites containing both Native American and historic-era artifacts.

### 2. National Register of Historic Places Database Search

SWCA searched the National Park Service's National Register of Historic Places (NRHP) online database to identify properties listed in the NRHP that are located within or near the subject parcels. No NRHP-listed properties were identified in the project parcels. The NRHP-listed property nearest the subject parcels is the Binghamton Rural Historic Landscape, which is approximately 0.6 mile southeast of the project parcels.

### 3. Recommendations

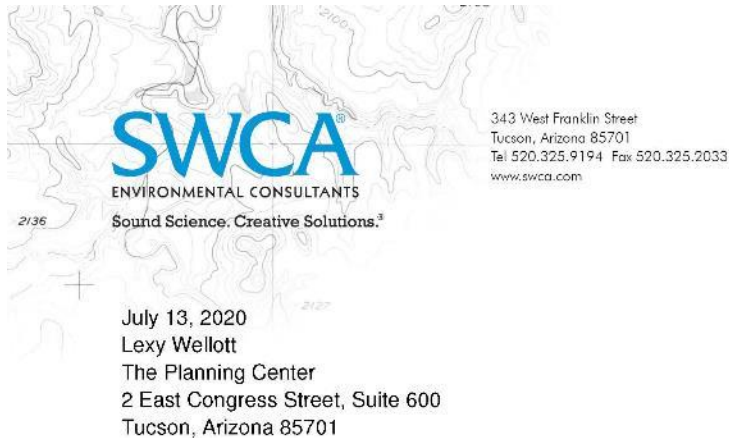
The entire parcel should have a Class III Survey that meets Arizona State Museum (ASM) and State Historic Preservation Office (SHPO) standards. If determined that archaeological resources are present, a testing program will be initiated. When testing reveals significant



resources eligible for the National Register, every effort will be made to review the project to determine if an adverse effect can be avoided. If it cannot be avoided, a testing report and data recovery plan shall be submitted to the City of Tucson Historic Preservation Office. Once approved, execution of the data recovery plan may proceed. See *Exhibit V.Q: SWCA Letter*.







**Re: Archaeological Records Review of Four Parcels along River Road in Pima County, Arizona**

Dear Ms. Wellott:

SWCA Environmental Consultants (SWCA) has reviewed the archaeological project and site records for Pima County Assessor's Parcels 108-24-003E, 108-24-004A, 108-24-026J, and 108-24-026k in support of the environmental review requirements for rezoning privately owned land with the intent of developing residential units. The parcels are located south of River Road, east of North Hacienda Del Sol Road, and north of the Rillito River in Section 20, Township 13 South, Range 14 East (Gila and Salt River Baseline and Meridian), on the U.S. Geological Survey Tucson North, Arizona, 7.5-minute quadrangle. Below are the results of the records search.

**SEARCH RESULTS**

According to a search of the archaeological site files and records contained with AZSITE and at the Arizona State Museum Archaeological Records Office, 40 archaeological survey projects have been conducted in or within 1.0 mile of the project parcels. These projects were conducted between 1981 and 2013 for residential, commercial, and school development, road improvements, potable water and wastewater pipelines, cellular communications towers, and riverbank stabilization and public use paths. Three surveys have slightly overlapped with the four parcels. These surveys were conducted between 1989 and 2003. One survey, conducted in 1989 for proposed Rillito Creek bank stabilization project, slightly overlapped with the southeast corner of Parcel 108-24-026J. A survey conducted in 1998 for water main improvements slightly overlapped with the northeast corner of Parcel 108-24-004A. Finally, one survey conducted in 2003 for proposed River Road improvements partially overlapped with the northern portion of all four parcels. Overall, approximately 1.13 acres (14 percent) of the project parcels have been surveyed.

Fourteen archaeological sites have been identified with 1.0 mile of the subject parcels, one site (AZ BB:9:18[ASM]) is adjacent to and may partially extend into the southeast corner of Parcel 108-24-026J. AZ BB:9:18(ASM) was originally recorded in 1938 as a prehistoric artifact scatter. An archaeological testing program was conducted at the site in 1990 prior to a channel stabilization project along Rillito Creek. The testing program included surface collection of artifacts, backhoe trenching, hand excavation of a test pit, backdirt screening, site stratigraphy mapping, and creating a site planview map. The backhoe trenching identified two prehistoric features (a charcoal-filled pit and a pit house) and one historic-era trash midden. Over 360 artifacts were collected and analyzed from the site, and the decorated ceramics collected suggests a Hohokam Colonial period occupation. The site was determined eligible for listing by the State Historic Preservation Office. The other 13 sites consist of eight Native American sites, consisting of artifact scatters, three historic-era sites, consisting of residential buildings and associated features, and two sites containing both Native American and historic-era artifacts.

In addition, the National Park Service's National Register of Historic Places (NRHP) online database was searched to identify properties listed in the NRHP that are located within or near the subject parcels. No NRHP-listed properties were identified in the project parcels. The NRHP-listed property nearest the subject parcels is the Binghamton Rural Historic Landscape, which is approximately 0.6 mile southeast of the project parcels.





**RECOMMENDATIONS/**

1. Most of the project parcels have not been surveyed. The three surveys that were conducted were linear surveys and only partially overlapped with the current project parcels and two of the surveys might not be considered satisfactory (adequate or accurate) when evaluated under SHPO Guidance Point No. 5: SHPO Position on Relying on Old Archaeological Survey Data (Available at <https://azstateparks.com/shpo-guidance-points>), primarily because of changes that have since occurred in survey methodology and site definitions. Therefore, SWCA recommends, that a qualified archaeological contractor be consulted before any ground-disturbances. A list of archaeological contractors is available on the Arizona State Museum (ASM) website at: <https://statemuseum.arizona.edu/crm>
2. Pursuant to Arizona Revised Statue §41-865, if any human remains of funerary objects are discovered during project work, all work must stop within the area of the remains and Dr. Claire Barker, ASM repatriation coordinator, will be contacted at 520-626-0320.
3. City, county, or municipal governments may have requirements; therefore, SWCA recommends that the relevant jurisdiction(s) be consulted.

If you have any questions about the results of this records search, please feel free to contact me at [dbarr@swca.com](mailto:dbarr@swca.com) or 520-325-9194.

Sincerely,

A handwritten signature in blue ink, appearing to read "David M. R. Barr", followed by a long horizontal flourish.

David M. R. Barr, M.A, RPA  
Project Director (Arizona Antiquities Act Permit No. 2020-029bl)





## References:

Aerial Photographs, Pictometry, 2018.

Balanced and Critical Basin Map, Pima County.

Plan Tucson, City of Tucson General & Sustainability Plan, ratified 2014.

City of Tucson GIS, TDOT Map Center, 2016.

City of Tucson Unified Development Code, 2016.

FEMA Flood Insurance Rate Map, Pima County, Arizona.

Institute of Transportation Engineers, Trip Generation Manuals, 7<sup>th</sup> Edition, Volumes 1 & 3, 2003.

MapGuide, Pima County Department of Transportation.

Stormwater Detention/Retention Manual, City of Tucson.

USGS Topographic Map, Jaynes Quadrangle.

