ENDEAVOUR Spirited Living Specific Plan

Roadway Segment	Recorded ADT	Year	Data Source	LOS D Capacity	2023 No Project ADT	Site Trips	2023 With Project	Existing Over/Under LOS D Capacity	2023 No Project Over/Under LOS D Capacity	2023 With Project Over/Under LOS D Capacity
Craycroft Road, North of River Road	30,151	2019	PAG	35,820	32,636	56	32,692	Under	Under	Under
Craycroft Road, North of Project Driveway	37,603	2020	FDS	35,820	39,905	196	40,100	Over	Over	Over
Craycroft Road, South of Project Driveway	37,545	2020	FDS	35,820	39,843	196	40,039	Over	Over	Over
River Road, East of Craycroft Road	16,017	2019	PAG	13,320	17,337	75	17,412	Over	Over	Over
River Road, West of Craycroft Road	13,920	2019	PAG	13,320	15,067	131	15,198	Over	Over	Over
Camino Blanco, South of River Road	220	2018	FDS (Estimated from Peak Hour Vols)	n/a	233	66	299	Under	Under	Under
Swan Road, South of River	27,125	2019	PAG	35,820	29,361	39	29,400	Under	Under	Under
Glenn Street, West of Craycroft	6,600	2019	PAG	13,990	7,144	39	7,183	Under	Under	Under

Table II.J.2.b: Average Daily Traffic & Level of Service

Notes:

All Daily Counts from Pima Association of Governments (PAG) website or collected by Field Data Services (FDS).

Daily Count on Camino Blanco estimated from Peak Hour counts collected by Field Data Services at River Road/Camino Blanco.

3. Intersection Performance

In the traffic impact study ("TIS") for this Project, the study area intersections were analyzed under "Without Project" and "With Project" conditions for the year 2023. The AM and PM peak hour analysis results for each condition indicates that the following intersections and movements will operate at LOS E or F under the 2023 "No Project" Condition and the 2023 "With Project" Condition:

River Road/Craycroft Road

- Eastbound Right, LOS E, AM
- Westbound Left LOS E, PM
- Northbound Left, LOS F, AM
- Northbound Through and Approach, LOS F, PM
- Southbound Through and Approach, LOS F, AM
- Southbound Left and Through, LOS F, PM
- Southbound Approach, LOS E, PM
- Intersection, LOS F, AM
- Intersection, LOS E, PM

ENDEAVOUR Spirited Living Specific Plan

Craycroft/Main Access Road

- Eastbound Left, LOS F, AM
- Eastbound Left, LOS E, PM

River Road/Camino Blanco

- Northbound Left, LOS E, AM (No Project Only)
- Northbound Left, LOS E, AM and PM (With Project)

River Road/Gregory School will continue to operate at LOS D or better with the Project during the peak hours.

With only access to Craycroft Road for Parcel A, the eastbound left turn movement on the Main Access Road will experience longer delays during both peak hours than under the No Project condition. For Parcel B, with only access to River Road, the northbound approach on Camino Blanco at its intersection with River Road will experience longer delays during both peak hours than under the "No Project" condition, but the relative impact would not be significant.

As indicated in the TIS, Project-related intersection mitigation recommendations include:

- Re-striping the two-way left turn lane on the northbound Craycroft Road approach to the Craycroft Road/Main Access Road intersection to delineate a 150-foot left turn lane.
- Provide a warranted southbound right turn lane on Craycroft Road for turns into the Main Access Road. This improvement should only be considered if the sight distance for drivers entering Craycroft Road from the Main Access Road is not reduced to an unacceptable distance because of the improvement.
- Reconstructing the Main Access Road as shown in *Exhibit II.A.1: Endeavour Concept Plan.*
- Providing signing and traffic control inside the reconstructed Main Access Road at the internal intersecting roads between the Craycroft Trailhead and the new Project/residences to the north. Wayfinding signs to the Project from the Trailhead road should also be provided.
- Drivers turning left out of the Main Access Road today experience delays representative of LOS E or LOS F conditions. Elderly (or any) drivers wishing to head north of Craycroft Road from the Main Access Road may opt to turn right from the Main Access Road onto Craycroft and seek a downstream opportunity to turn around and head north. The recommended option would be to restrict access to right turns out only to eliminate the potential for eastbound to northbound left turn crashes. If left turns out of the Project at the Main Access Road continue to be permitted by City of Tucson (instead of requiring right-turns onto Craycroft with a U-Turn at Gregory School light for northbound Craycroft

movement), then it is recommended to provide a separate left turn and right turn lane on the Main Access Road approach to Craycroft.

- To assist exiting drivers from the Main Access Road who have destinations on Craycroft Road north of the Project access, a new raised median delineated Uturn lane is recommended at the Craycroft Road/Gregory School access for the north leg of the intersection. The purpose of this is to provide a southbound Uturn lane at the intersection for use by drivers whose destinations are north of the Project access driveway but who cannot turn left out of the driveway due to projected high traffic volumes on Craycroft Road or because left turns will be restricted under the preferred option described above and turn right out of the Project driveway. The north leg of the Craycroft Road/Gregory School intersection would be reconstructed and restriped to provide a 150-foot left turn lane with a raised median separating northbound and southbound traffic. If this recommendation is approved, a left turn phase warrant analysis should be conducted for the southbound left turn lane.
- Parcel B trips will be only via Camino Blanco to River Road. Access from Parcel A to Camino Blanco will be only for emergencies through a gated access on the west side of the Property and will only be used for emergency vehicles if the Main Access Road is not accessible.

4. Concurrency

Parcel A site traffic will enter Craycroft Road, which is operating over its LOS D capacity based on Existing Daily Volumes. However, the site traffic will represent approximately 0.5% of the projected traffic on Craycroft Road and thus will not be a significant contributor to daily traffic volumes. The addition of Parcel B project trips on Camino Blanco will increase daily volumes to approximately 299 vehicles per day, or about 3% of the daily volume capacity of Camino Blanco.

5. Bicycle & Pedestrian Circulation

Sidewalks and bike lanes will remain along the Project frontage on Craycroft Road. Access to The Loop will be provided for residents and staff from the Property as shown in *Exhibit II.C.1: Endeavour Recreation Concept.* Limiting egress from the Main Access Road to right turns out only will reduce potential conflicts between motor vehicles, bicyclists and pedestrian traffic.

Pedestrian paths within Endeavour will be clearly defined and encouraged for internal use. The residents will not be typical "automobile dependent" users, and thus, Endeavour will not be a high traffic generator.

A pedestrian pathway providing Parcel B residents with access to The Loop will be located within a private access easement along the property line between Endeavour and Parcel B.

6. Onsite Vehicular Circulation

Access to the Property will be from Craycroft Road on a two-lane road that meanders through County property to a gated Project entrance. Onsite Project circulation will be via a two-lane divided boulevard. The internal roadway system will provide access to the residential blocks as shown in *Exhibit II.A.1: Endeavour Concept Plan*. All access roads will be private.

On-site circulation for Parcel B will be via two new local roads, as shown in Exhibit II.A.2.

7. Traffic Impact Study

M. Esparza Engineering has prepared a TIS to analyze the impacts from this proposed Project on surrounding roadways and intersections. The TIS, dated June 6, 2022, is included as Appendix C of this Specific Plan.

K. Utility Infrastructure

- 1. Sewer
 - a. Parcel A

Sanitary sewer service for the Property is provided by Pima County Regional Wastewater Reclamation Department ("PCRWRD") via an existing 30-inch sewer main located along the northern edge of the Property. This sewer main was constructed in 1968 and conveys waste flows to the west within existing public sewer infrastructure running parallel with the Rillito River.

Redevelopment of the Property would require analysis of any impacts to the existing sewer infrastructure, but relocation/realignment of the existing public sewer main and/or laterals is not anticipated. Currently the existing public sewer has capacity available for an increase of at least 34,000 gallons-per-day of flow, based on a recent capacity request response from PCRWRD. (See *Exhibit II.K.1.a.*) This flow allocation was estimated based on a conservative estimate for a 21-acre mixed-use development. As the development design moves forward it will be necessary to obtain current capacity allocation responses from PCRWRD to ensure capacity exists in the existing system; however, it is not anticipated that any capacity issues will exist.

b. Parcel B

Sanitary sewer service for the Property is provided by PCRWRD via an existing 30inch sewer main running through the middle of Parcel B and an existing 8-inch sewer main in the northwest corner of Parcel B. This sewer main was constructed in 1968 and conveys waste flows to the west within existing public sewer infrastructure running parallel with the Rillito River.

Redevelopment of the site would require analysis of any impacts to the existing sewer infrastructure and could require additional structures and/or laterals within the existing alignment. The public sewer main will not be in jeopardy of any re-work due to its location along the future access drive for Parcel B. A capacity response letter from PCRWRD indicated capacity is currently available for the proposed 22-lot residential development. (See *Exhibit II.K.1.b.*) As the development design moves forward it will be necessary to obtain current capacity allocation responses from PCRWRD to ensure capacity exists in the existing system; however, it is not anticipated that any capacity issues will exist.

Exhibit II.K.1.a: Parcel A Wastewater Capacity Response Letter



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

JACKSON JENKINS DIRECTOR PH: (520) 724-6500 FAX: (520) 724-9635

August 6, 2020

Theresa Hadley Cypress Civil Development 2030 E Speedway Blvd. Ste 110 Tucson, AZ 85719

Type III Sewerage Capacity Allocation No. P20WC00146

RE: Notice of Intent to Discharge for Envisage Tucson, Parcels 10926003D, 10926003H, 10926004D. Estimated Flow 33,935 gpd (ADWF).

This letter is provided to satisfy those submittal requirements under General Aquifer Protection Permit 4.01 for an extension of a sanitary sewer collection system as indicated below:

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

Based on the wastewater flow estimate(s) supplied by your firm, and on my inquiry of the person(s) directly responsible for gathering information about the downstream public sewer system, I affirm that, to the best of my knowledge and belief, that the additional wastewater to be discharged from this development to Pima County's public sewer system will not:

- Cause any flow or effluent quality limits to be exceeded at the treatment facility.
- B) Cause Pima County's public sewer conveyance system to fail to meet the performance standards of Arizona Administrative Code R18-9-E301(B).

Should the actual wastewater flow and/or contaminant concentrations generated by this development prove to be significantly different than your firm's estimates, this affirmation may be withdrawn.

Capacity is available for this project in the public sewer C-072, downstream from manhole 1712-08.

This letter shall act as an affirmation of treatment and conveyance capacity for the above referenced project, if and only if, a Construction Authorization to build the necessary sewer is issued by the Pima County Department of Environmental Quality pursuant to Arizona Administrative Code R18-9-A301(D)(c) within 180 days of the date of this determination. If a Construction Authorization for the proposed sewer is not issued within this 180 day period, this determination shall be considered out of date and no longer valid.

Should a Discharge Authorization for the sewer not be issued by the Arizona or Pima County Department of Environmental Quality before the Construction Authorization expires, the reservation of capacity becomes null and void, canceled and of no further force and effect.

Reviewed by: Mirela Hromatka, Planner Sr.

Exhibit II.K.1.b: Parcel B Wastewater Capacity Response Letter



JACKSON JENKINS DIRECTOR PH: (520) 724-6500 FAX: (520) 724-9635

July 1, 2021

Theresa Hadley Cypress Civil Development 2030 E Speedway Blvd #110 Tucson, AZ 85719

Capacity Response No. P21WC00191 Type II

RE: Envisage Tucson SFR, Parcels 10926005H, 10926005L, 10926005M Estimated Flow 4,536 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 C-072, downstream from manhole 1712-07.

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) 724-6488.

Reviewed by Mirela Hromatka, Planner Sr.

2. Water

a. Parcel A

Currently the Property is serviced for potable water by the Tucson Water District ("Tucson Water"). (See *Exhibit II.K.2.a.*) The existing water system consists of a 6-inch water main accessing Parcel A from the northeast and carrying water from the east along Parcel A's northern boundary. This existing asbestos cement water main was constructed in 1968 to serve the residential users on N. Craycroft Road and E. River House Road.

Development of the Property will require attention to the existing water system and could require relocations and/or modifications depending on where new development occurs and what water infrastructure is needed. Discussions with Tucson Water has revealed that the current system pressure in the existing main off N. Craycroft Road is in the range of 115 psi, which would provide ample pressure and fire flow for any future development. However, fire flow requirements and detailed site-specific modeling by Tucson Water will be necessary to determine if any modifications to the existing system is needed.

b. Parcel B

Currently the site is serviced for potable water by Tucson Water. (See *Exhibit II.K.2.b: Parcel B Water Availability Letters.*) The existing water system consists of a 6-inch water main accessing Parcel B from the east and carrying water from the east through the middle of Parcel B. This existing asbestos cement water main was constructed in 1968 to serve the residential users on N. Craycroft Road and E. River House Road.

Development of the site will require attention to the existing water system and could require relocations and/or modifications depending on where new development occurs and what water infrastructure is needed. Discussions with Tucson Water has revealed that the current system pressure in the existing main from N. Craycroft Road is in the range of 115 psi, which would provide ample pressure and fire flow for any future development. However, fire flow requirements and detailed site-specific modeling by Tucson Water will be necessary to determine if any modifications to the existing system is needed.

Exhibit II.K.2.a: Parcel A Water Availability Letter





Cypress Civil Development 2030 E. Speedway Blvd #110 Tueson, AZ 85719

Attn: Theresa Hadley

SUBJECT: Water Availability for Project: 3475 & 3505 N. Craycroft Rd., APN: 10926003H, D & 004D Case #: WA3213, T-13 R-14 S-26, Lots: 9999, Location Code: UNI, Total Area: 24.4ac, Zoning: SR

WATER SUPPLY

Tueson Water will provide water service to this project based on the subject zoning of the above parcels. Tueson Water has an assured water supply (AWS) designated from the State of Arizona Department of Water Resources (ADWR). An AWS designation means Tueson 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.

Moureale

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

MM:ka cc: 10926003H,D & 004D.docx/New Area/WAL parcels

> P.O. Box 27210 • Tucson, AZ 85726-7210 520.791.4718 • tucsonaz.gov/water 🖾 🚺 🗐

Exhibit II.K.2.b: Parcel B Water Availability Letters



July 6, 2021

Cypress Civil Development 2030 E. Speedway Blvd., Ste 110 Tueson, AZ 85719 Attn: Theresa Hadley

SUBJECT: Water Availability for Project: 5150 E. River House Rd., APN: 109-26-005,L,M (2) parcels, Case#: WA3622, T-13 R-14 S-26, Lots: 9999, Location Code: UNI, Total Area: 12.35, Zoning: CR-1, SR.

WATER SUPPLY

Tueson Water will provide water service to this project based on the subject zoning of the above parcels. Tueson Water has an assured water supply (AWS) designated from the State of Arizona Department of Water Resources (ADWR). An AWS designation means Tueson 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.

Sincerely. Michael Moureale

Michael Mourreale Engineering Manager Tucson Water New Development

MM:km cc: WA3622 10926005L,M (2) parcels.docx/New Area/Committed Demand/WAL parcels

> P O. Box 27210 - Tucson, AZ 85726-7210 520.791.4718 - tucsonaz.gov/water 2 1 6

ENDEAVOUR Spirited Living Specific Plan





November 23, 2021

Cypress Civil 2030 E. Speedway Blvd. Suite 110 Tucson, AZ 85719

Attn: Theresa Hadley

SUBJECT: Water Availability for Project: 5180 E. River House Rd., APN: 10926005H, Case #: WA3823, T-13 R-14 S-26, Location Code: UNI, Total Area: .9ac, Zoning: CR-1

WATER SUPPLY

Tueson Water will provide water service to this project based on the subject zoning of the above parcels. Tueson Water has an assured water supply (AWS) designated from the State of Arizona Department of Water Resources (ADWR). An AWS designation means Tueson 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.

Sincerely,

Michael Moureale

Michael Mourreale Engineering Manager Tueson Water New Development

MM:ka cc: WA3823 10926005H.docx/New Area/Committed Demand/WAL parcels

P.O. Box 27210 + Tucson, AZ 85726-7210 520.791.4718 • tucsonaz.gov/water

L. Master Sign Program

As the character of Endeavour is intended to capture the feel of a resort, all signage will be carefully crafted and sited to be considerate of its surroundings. As with a typical resort, the signage leads both residents and visitors into the Property, helps direct them to certain amenities, and maps out the residential buildings. To promote a consistent design theme, Envisage will prepare a Master Sign Program for both onsite and offsite signage.

All signage on Parcel B will comply with County standards. The below standards only apply to Endeavour.

1. Monument sign

The Property has no street frontage along Craycroft Road. The intent is to provide decorative entry walls that serve as a backdrop for Project identity at the Craycroft entry and Endeavour entry. The sign areas will also have ornamental landscaping that is colorful throughout the year to enhance the entry experience. The letters describing Endeavour will be 24-36 inches in height and either externally lit by LED spotlighting or back-lit. The walls will be a maximum of 10 feet in height with a maximum of 200 square feet of signage area for Endeavour.

A pair of monument signs, one on the north and the other on the south side of the Craycroft access road, shall be permitted to identify both Endeavour and Craycroft Trailhead/The Loop. These signs will be subject to a valid easement with the County ("Sign Easement") to locate the signs in an area outside of the right-of-way and outside of any sight visibility triangles. The Sign Easement shall also provide language addressing access and maintenance of the monument signs.

One additional monument sign will be located at the Project entry where the Craycroft access road splits off to Endeavour's driveway.

2. Directional Signage

Directional signs are considered "Concealed Signs" designed and located within the interior of the Project and are not meant to be legible from the public right-of-way. Concealed Signs are exempt from County review, except as may be required for a building and/or electrical permit. Concealed signs are also subject to City-County Outdoor Lighting Code ("OLC") regulations.

The locations outlined below are areas that will need directional signage, which identifies amenities and cues the user on how to navigate Endeavour. In all cases, these signs will be low impact on small placards and will be externally lit for easy readability at night.

Directional signage with a Project directory will be provided at the entry gate to allow visitors to contact residents for access to the community. Because Endeavour is a gated residential community, some visitors will not have access to enter and will be directed through a circle drive to return to Craycroft Road.

Along the entry drive, certain amenities will be identified through small placards mounted on poles, such as:

- Clubhouse
- Dog park
- Bocce courts
- Pickle ball courts
- Putting green
- Outdoor exercise areas
- Trail access

In addition, there will be small ground-mounted placards which show residential address numbers, in groupings, as Endeavour is organized. These will be located at entry points to resident drives.

In all cases, directional signs will be small placards of approximately 12 inches in height with letters approximately 8 inches denoting the various amenities or residence addresses. If the amenities or addresses are grouped by more than one, the signage placard will be kept to a limited size, so to not overpower the landscape surroundings.

Service areas for amenities, such as charging stations, loading areas or short-term parking, will be signed with ground-mounted placards located in front of or adjacent to the area, similar to public parking signs. Signage will also be installed along The Loop to identify access and amenities, including signage for commercial/retail uses.

3. Building Signs

Up to 3 signs identifying Endeavour, with a maximum area of 20 square feet each, shall be permitted on the walls of buildings within Endeavour.

4. Prohibited Signs

There will be no flashing signs permitted, nor any signage with rotating letters. The intent of Endeavour is to emulate the subtle character of resort living, and there is emphasis on the residential character of the community.

Any signage that appears commercial in nature or that advertises goods or services will be prohibited, except for signage installed in the Public Amenity area of the Specific Plan.

M. Lighting

Other than street lighting, Endeavour's lighting will be low-level bollard lighting no taller than 4 feet in height. All street lighting will be no higher than 14 feet in height. All lighting will feature down-lit fixtures and will comply with the OLC, including, but not limited to, lumens, light-source shielding and light trespass limits. Particular care will be given to lighting

adjacent to the wildlife corridors along the southern boundary, the drainageway within Parcel A and the buffer area between Parcels A and B. In those areas, lighting shall be directed away from the wildlife corridors.

N. Historic Resources

Historic resources were identified on/near the Property during the Rillito River bank stabilization construction project. The Davidson Flume is a remnant of a turn of the century water conveyance system constructed to carry water from the Rillito River to the Mormon settlement of Binghampton. Schroeder's Well, located on the north bank of the Rillito River, was an access point to the flume for many years. Envisage has committed to incorporating an interpretive sign into the Public Amenity area of the Project near the Rillito River Park entrance that presents the history of both the Davidson Flume and Schroeder's Well.

III. IMPLEMENTATION AND ADMINISTRATION

A. Administration and Interpretation

The Specific Plan shall be administered by the Pima County Planning Official, and all implementation decisions shall be based on the purpose of the Specific Plan. If a conflict arises between the Specific Plan and the PCZC, the Specific Plan shall control. If the Specific Plan is silent on any issue, and the PCZC is consulted, the purpose and intent of the Specific Plan shall control the Planning Official's decision whether and how to apply the PCZC. Appeals of any Planning Official interpretation of this Specific Plan may be made to the Board of Supervisors within 30 days of the date of the interpretation. A fee in accordance with adopted Pima County Development Services Department Fee schedule for an "Appeal of an Interpretation" and an "Advertised Public Hearing" must accompany any such appeal. The Specific Plan will not result in the modification or change of any existing County-adopted building codes.

B. Phasing and Procedures for Development Review

The Project is currently intended to be developed in two phases. Phase I will commence upon approval of the Specific Plan. Envisage will submit a development package for Parcel A, including the Public Amenity area shown in *Exhibit II.A.1: Endeavour Concept Plan*, in conformance with the Specific Plan and conditions of approval. (See Section V.) Detailed traffic and hydrology reports will be submitted with the development package, if required. A Conditional Letter of Map Revision ("CLOMR") will be required as part of the Specific Plan's implementation. A separate set of development/construction plans will be submitted simultaneously with Parcel A related to improvements on the adjacent County Flood Control District property.

Phase II will consist of the residential development in Parcel B. Parcel B will be platted in conformance with Specific Plan regulations. Supplemental traffic and/or drainage reports may be required at time of tentative plat submittal per County requirements.

The Owners serve as the Master Association and Property Manager for their respective Parcels in the Specific Plan. Through a self-certification process, the Owner shall review and approve all development packages/Project design features, signage applications, and architectural/building plans proposed for their respective Parcels prior to County submittal.

C. Amendments

1. Minor

The County Planning Official may administratively approve minor (or insubstantial) changes, as defined below, to the Specific Plan, provided such changes are in conformance with the overall intent, goals and objectives of the Specific Plan as presented herein.

The following shall be considered minor changes that fall within the administrative purview of the Planning Official:

- Addition of new information to the Specific Plan, maps or text otherwise in compliance with the below standards.
- Changes to the public or private infrastructure as presented herein as necessary to properly serve the Specific Plan.
- Addition of permitted uses that may not be specifically listed in Section II.D of this Specific Plan, but which are determined to be sufficiently similar in type and nature to those listed as permitted.
- Adjustments to the Development Standards in Section II.F of this document that are not harmful to the interests of the larger community or adjacent neighborhoods, or which are not explicitly stated in the Specific Plan, but which are consistent with the guiding goals and objectives of the Project and do not create any public health or safety issues.
- Adjustments to any aspect of Section II of this Specific Plan that is required to comply with changes in local, state or federal safety and/or health codes.
- 2. Major

Major (or substantial) amendments to the Specific Plan shall be those changes or modifications that materially alter the guiding goals and objectives as presented in the Specific Plan. Major amendments to the Specific Plan shall be processed in accordance with Section 18.90.080 of the PCZC.

IV. SITE INVENTORY

A. Land Use

1. Location/Regional Context

The 34-acre Property, which includes all of County Assessor Parcel Number 109-26-003H and portions of Parcel Numbers -003D and -004D (Parcel A, 20.82 acres) and Parcel Numbers 109-26-005H, -005L and -005M (Parcel B, 13.24 acres), is located west of Craycroft Road, south of River Road, and adjacent to the north bank of the Rillito Creek within Township 13 South, Range 14 East, Section 26. (Refer to *Exhibit I.A: Regional Location Map* in previous section.) The Property is situated in the Catalina Foothills area of unincorporated Pima County.

2. Existing Land Uses

a. Onsite Land Uses

There are two single-family residences currently under the same ownership as Parcel A. After consolidation and reconfiguration of the parcels, the two singlefamily residences will be retained on two separate parcels.

Parcel A is largely vacant apart from a single-family home and accessory structures, including a barn and storage sheds. The majority of the Property has been disturbed, and it historically featured agricultural land uses. All existing structures on the Property will be removed as part of this Project.

The majority of Parcel B has been disturbed. Parcel B currently includes twelve (12) single-family residences and related accessory structures on three separate parcels. All existing residences may remain as part of this Project.

There are no billboards on the Property.

b. Offsite Land Uses

The Rillito Creek and Rillito River Park Trail are located south of the Property. The Rillito River Park Craycroft Trailhead is located on a Pima County-owned parcel adjacent to the Property's eastern boundary. Low-density single-family residential uses surround the remainder of the Property.

3. Existing Zoning

As indicated in *Exhibit IV.A.3*, the existing onsite and offsite zoning is as follows:

Parcel A:	Suburban Ranch (SR)
Parcel B:	Suburban Ranch (SR) & Single Residence Zone (CR-1)
North:	Suburban Ranch (SR), Suburban Ranch Estate (SR-2) & Single Residence Zone (CR-1)
South:	Suburban Ranch (SR)
East:	Suburban Ranch (SR) & Suburban Ranch Estate (SR-2)
West:	Suburban Ranch (SR)

4. Existing Easements

All existing easements on the Property are depicted in *Exhibits IV.A.4.a* & b.

5. Comprehensive Plan

This Property and all surrounding properties are located within the Catalina Foothills Planning Area and are designated Low-Intensity Urban 1.2 (LIU-1.2.) within Pima Prospers. (See *Exhibit IV.A.5: Comprehensive Plan Designations*.)









B. Topography & Grading

- 1. Parcel A
 - a. Topographic Characteristics

Parcel A slopes consistently from north to south with an elevation differential of approximately 45 feet from E. River House Road at its northern boundary down to the Rillito River Trail at the southern Property boundary and an elevation differential of approximately 10 feet from the northern limits of disturbance to the Rillito River Trail at the southern boundary. The existing topography allows surface flow in a southwesterly direction, and stormwater exits Parcel B at a low point along the western boundary. The northern, undisturbed portion of Parcel A, which is subject to the County's HDZ, includes rock outcrops and talus slopes and will remain undisturbed and in its natural state. The existing concentration point from the above-mentioned disturbed area will provide the proper mitigation to maintain the existing drainage pattern. In general, slopes range from 1%-5% on the disturbed portion of Parcel A. (See *Exhibit IV.B.1: Parcel A Existing Topography.*)

b. Average Cross Slope

ACS <u>= I x L x 0.0023</u> Acres

Interval (I) = 1 feet Total length of contours (L) = 59,506 lf Area (A) = 20.8 acres (906,816 sf)

 $ACS = \frac{1 \times 59,506 \times 0.0023}{20.8 \text{ acres}} = 6.58\%$



2. Parcel B

a. Topographic Characteristics

Parcel B slopes consistently from north to south and southwest with an elevation differential of approximately 52 feet from E. River House Road at its northern boundary down to the Rillito River Trail at the southern boundary. The existing topography directs surface flow to the southern boundary, where it is released into the Rillito River. In general, slopes range from 1%-5% on the disturbed portion of Parcel B. (See *Exhibit IV.B.2: Parcel B Existing Topography*.)

b. Average Cross Slope

ACS <u>= I x L x 0.0023</u> Acres

Interval (I) = 1 feet Total length of contours (L) = 32,526 lf Area (A) = 13.2 acres (576,604 sf)

ACS = $\frac{1 \times 59,506 \times 0.0023}{13.2 \text{ acres}}$ = 5.67%



C. Hydrology

- 1. Offsite Watersheds
 - a. Parcel A

Based on site investigation, recent topographical survey information and field verification, it has been determined there are 7 offsite watersheds affecting Parcel A. All offsite watersheds flow onto Parcel A from the north foothills and combine with onsite flow following existing drainage patterns.

The first watershed, denoted as OFF1 on *Exhibit IV.C.1.a: Parcel A Offsite Watersheds*, is the largest at 19 acres in size generating up to 68cfs during a 100year storm event. This flow enters watershed E2 as concentrated flow where it immediately spreads out as it flows south into the cleared open field. This stormwater combines with onsite runoff and flows southward and exits the Property at the southwest corner of E2. (See also *Exhibit IV.C.2.a.*)

The second watershed, OFF2, is 2.5 acres in size emanating from the hillside just north of onsite watershed E1. This runoff arrives along the northern boundary as shallow sheet flow at high velocity from the foothills where it combines with onsite stormwater slowing to a slow, shallow flow across the field and eventually exiting the Property as wide, shallow flow to the west.

The third offsite watershed, OFF3, is 1.4 acres in size generating up to 7.1cfs that arrives at the northern Property boundary from the slopes of the foothills and combines with onsite flow in watershed E2 where it migrates south and exits the Property at the southwest corner of the Property.

Offsite watershed OFF4 consists of the existing residential structure and its courtyard. This area is 0.7 acres in size generating 6cfs during a 100-year event and flowing south into onsite watershed E2.

The fifth (OFF5) and sixth (OFF6) offsite watersheds are 1.7 and 1.2 acres in size generating 10cfs and 6cfs, respectively, emanating from the hillside north of onsite watershed E2. This runoff combines with onsite flows traveling westward then south where it exits the Property at the southwest corner of watershed E2.

The 7th offsite watershed, OFF7, is 8.8acres in size generating up to 41.7cfs for a 100-year event. This stormwater arrives onsite from the northeast corner of the Property and flows southward, then west toward the existing berm that redirects the flow southward. Combined with onsite flow, all stormwater exits the Property at the southwest corner of onsite watershed E2.



b. Parcel B

Based on site investigation, recent topographical survey information and field verification, it has been determined that there are 3 offsite watersheds. All offsite watersheds flow onto Parcel B from the north foothills and combine with onsite flow.

The first offsite watershed, denoted as E5.5 on *Exhibit IV.C.1.b: Offsite Watersheds*, is the largest at 71 acres in size, generating up to 242cfs during a 100-year event. Stormwater flows south through the watercourse where it narrows as it crosses Camino Blanco Road at the River House Road intersection. Flowing west, it is contained within the banks as the watercourse turns south. Upon approaching a culvert within watershed E5.3, flow breaks out along the left bank. Stormwater stays contained within the wash and dirt road as it flows south and then west as it exits Parcel B midpoint along the western boundary.

The second offsite flow is combined with watershed E 5.3. This area is 11.4 acres in size generating up to 39.6cfs during a 100-year event. This runoff flows off the foothills and into the watercourse as it flows through Parcel B and exits along the western boundary.

The third offsite watershed (E5.7) flows from the hillside adjacent to watershed D5.1. Stormwater runoff of 14cfs arrives from 2 acres of hillside from the east. It combines with onsite flow from D5.1 flowing southward then eastward as shallow sheet flow across Parcel B ultimately exiting along the western boundary.

Combined with onsite flow, all stormwater exits Parcel B at a low point along the western boundary.

2. Onsite Hydrology

a. Parcel A

Parcel A is approximately 20.82 acres in size and lies within a suburban residential area of foothills in the northern portion of the Property that then flattens out to a valley typical of riverine floodplain fringe. The flat area, for the most part, has been cleared of vegetation and consists of desert grasses and urban lawns. Along the south perimeter of Parcel A, there are mature mesquite trees, densely vegetated and immediately adjacent to the Rillito River. Soils within Parcel A are classified by the United States Soil Conservation Service ("SCS") as 47% "A" and 53% "C" in the foothills and 44% "A" and 56% "B" in the valley.



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The onsite drainage was divided into two watersheds: the portion that will change due to the development, 18.23 acres, and the remaining 2.59 acres of the 20.82 total acres. The first watershed, denoted as E1 on Exhibit IV.C.2.a, is 6.1 acres in size, is rectangular in shape with the potential to generate up to 27.3cfs during a 100-year event. Parcel A is flat with a slope of less than 0.4 percent that descends from the east to the west. The entire area has been cleared for decades with trees along the southern perimeter and a few scattered trees along the western boundary. There is a berm along the eastern boundary and slightly higher elevation on the north, south and western boundary creating a pond-like area during major storm events. When stormwater reaches a depth that exceeds the raised perimeter boundary, stormwater flows as shallow sheet flow to the west onto Parcel B. This watershed also receives offsite runoff from the northern foothills. The offsite flow combines with onsite, spreading out as wide shallow flow migrating to the west. All stormwater from this watershed continues west downstream of the Property until it reaches a cross-drainage outlet that allows it to flow south into the Rillito River approximately 1 mile west of the Property.

Watershed E2 is 12.1 acres in size with the potential to generate up to 40.1cfs for a 100-year storm event. This area consists of the lower portions of Parcel A that is relatively flat and has been cleared for decades. Runoff flows from the east where there is dense vegetation in a westward direction as shallow sheet flow. This area has slightly raised boundaries that create a pond within the area until water reaches a depth where it will migrate west. The eastern one-third has an existing structure and is surrounded by dense vegetation, mainly mesquite trees. The remaining two-thirds is mostly urban lawn with trees along the south and west perimeters. There is a berm along the western boundary that causes the stormwater to be impounded and re-directed southward toward the Rillito River. Outflow from Parcel A occurs at its southwest corner within a shallow swale that conveys most of the stormwater through a scupper across the Loop river path and into the Rillito River. (Existing conditions are depicted in *Exhibit IV.C.2.a: Parcel A Onsite Drainage Conditions.*)



b. Parcel B

Parcel B is approximately 13.3 acres in size and lies within a suburban residential area at the base of foothills that flattens out to a valley typical of riverine floodplain fringe. Vegetation is dense with mature mesquite trees with most of the underbrush cleared and some bare areas where vegetation has been removed completely. Soils within Parcel B are classified by SCS as A and B soils.

The onsite drainage was divided into five watersheds. The first watershed, denoted as E5.1 on *Exhibit IV.C.2.b*, is 3.9 acres in size with the potential to generate up to 16.3cfs during a 100-year event. Parcel B descends from north to south with a slope that varies from 6% at the northern portion to 0.3% at the south. Vegetation is sparse on the northern end with mature, dense vegetation to the south. When stormwater reaches the southern end of the watershed, it slowly migrates west combining with E5.2, E5.3 and E5.4 prior to exiting Parcel B along the western property boundary.

Watershed E5.2 is 0.8 acres in size that generates up to 4.8cfs during a 100-year event. This area has four houses on it where half of the rooftop runoff flows through Parcel B following a dirt road southward. At the southern boundary, stormwater runoff slows as the topography flattens out and flows westward.

Watershed E5.3 is much like the 5.1 and 5.2 in that it slopes from north to south following a dirt road. This area consists of 4 houses where half of the rooftop runoff on each house flows drains to the dirt road. Topography averages 2% where it is slightly steeper at the northern end and flattening at the southern end of the watershed. As with the previous watersheds, stormwater combines (as outlined above) as it migrates west.

Watershed E5.4 is 11.4 acres in size that consists of 3 houses at the base of the foothills, three houses that has half of the rooftop runoff contributing and an offsite watercourse that flows through Parcel B. The watercourse contains runoff as it enters this watershed until it reaches the culverts where breakout stormwater flows around the culvert and continues southward. Up to 39.4cfs contributes to the runoff and flows within the watercourse southward. Topography is flat and the flow widespread through dense vegetation. The watercourse then changes direction as it reaches the low point on the southern end and exits Parcel B along the western boundary. Aggradation is prevalent in this area demonstrating that the velocity within the watercourse decreases as it widens and flows through the remnants of a mesquite bosque.

Watershed E5.6 is within a valley that is flat with less than 0.2% slope with rills and valleys throughout. Stormwater runoff migrates in multiple directions until it reaches the western side of Parcel B where the topography is continuous sloping to the west. There are multiple sump areas where stormwater accumulates. This area was historically part of the Rillito River floodway and fringe. The majority of the vegetation has been removed with dense mature native trees in low points and a pond that is centered within the watershed. Although runoff has been calculated to be 11.7cfs for the 100-year event, this is a conservative estimate, as the actual runoff rate may be much less due to the flat topography, multiple sump areas and the meandering multi-direction of flow.

3. Existing Drainage Conditions & Infrastructure

a. Parcel A

A man-made berm divides onsite watersheds E1 and E2. This berm has been in place for decades. It is believed to be constructed to direct stormwater runoff from the largest offsite watershed south to the Rillito River rather than westward.

There are seven offsite watersheds that arrive onsite from the northern foothills. The 100-year peak discharge at each offsite concentration point ranges from 3cfs to 68cfs. (See *Exhibit IV.C.1.a: Parcel A Offsite Watersheds.*)

Parcel A is adjacent to a regional watercourse, the Rillito River. The Rillito River is armored with soil-cement bank stabilization; therefore, the erosion hazard setback is at the top of bank. Parcel A is located within an undesignated basin and is greater than one acre in size; therefore, it will be subject to detention requirements to mitigate the increase in runoff caused by the development to less than or equal to existing conditions runoff.

Peak discharge rates were calculated using the Pima County Regional Flood Control Districts PC-Hydro Methodology. The peak flow rate is proportional to the rainfall depth average over the time of concentration, and infiltration is a function of the soil group types (A, B, C and D) with watersheds less-than one square mile.



b. Parcel B

There are three offsite watersheds that arrive onsite from the northern foothills. The 100-year peak discharge at each offsite concentration point ranges from 9cfs to 242cfs. (See *Exhibit IV.C.1.b: Parcel B Offsite Watersheds*).

Parcel B is adjacent to a regional watercourse, the Rillito Creek. The Rillito Creek is armored with soil-cement bank stabilization; therefore, the erosion hazard setback is at the top of bank. Parcel B is located within an undesignated basin, is greater than one acre in size, and therefore, it will be subject to detention requirements to reduce the increase in runoff due to the development. (See *Exhibit IV.C.2.b: Parcel B Onsite Drainage Conditions.*)

Peak discharge rates were calculated using Pima County Regional Flood Control Districts PC-Hydro Methodology that only applies to the arid southwest taking into account slope, vegetation cover and impervious surfaces. The peak flow rate is proportional to the rainfall depth average over the time of concentration, infiltration is a function of the soil group types (A, B, C and D) with watersheds less-than one square mile.

- 4. Floodplain
 - a. Parcel A

According to the Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Map ("FIRM") Panel No. 04019C1694L, dated June 16, 2011, Parcel A is located in a shaded Zone X, which is an area determined to be inside the 500-year floodplain. There is an SFHA at the southeast corner of the Property that is an AE Zone with established water-surface elevations ("WSEL") from the Rillito Creek. Any structures within this zone shall have the finished floor elevation ("FFE") 1.5 feet above the published WSEL.

The Rillito Creek may require remapping the FIRM to update the hydraulic conditions due to changes the Project may create.

b. Parcel B

According to FEMA FIRM Panel No. 04019C1694L, dated June 16, 2011, Parcel B is located in a shaded Zone X, which is an area determined to be inside the 500-year floodplain and depths of flow less than 1 foot depth for the 1% annual chance flood.

The Rillito Creek is currently under required remapping the FIRM to update the hydraulic conditions due to changes the Property may create.
D. Biological Impact Report

This Biological Impact Report ("BIR") has been prepared for inclusion in the Site Analysis Report as part of a Specific Plan application for the Property. The Property contains two parcels, Parcel A (or "Endeavour") and Parcel B, which is owned separately from Parcel A. This BIR will present responses, as they pertain to the Property, to all questions set forth in the County's BIR Guidelines, March 2010. The responses to the specific questions for the BIR apply to both Parcel A and Parcel B.

1. Landscape Resources

Identify whether the proposed site occurs wholly or partially within any Maeveen Marie Behan Conservation Lands System Category including Important Riparian Areas and Special Species Management Areas.

This Property occurs partially within Important Riparian Area and Biological Core Management Area. The area mapped Biological Core Management area was heavily disturbed prior to the adoption of the CLS in 2001. Areas mapped IRA contain some vegetative resources, but also had significant disturbance prior to 2001.

Exhibits IV.D.1.a & *b* show the mapped location of the IRA included in the CLS. The Exhibits also show an area mapped as Hydro/Meso Riparian along Parcel A's western boundary and Parcel B's eastern boundary. This area was not included in the CLS, and while mapped Hydro/Meso Riparian, it does not contain any vegetative resources and does not convey any significant drainage.

Identify whether the proposed project occurs in the vicinity of any of the six general areas identified as Critical Landscape Linkages.

This Property does not occur within the vicinity of any of the six general areas identified in the CLS as Critical Landscape Linkages.

If the property is a Habitat Protection or Community Open Space priority acquisition property, as displayed on SDCP MapGuide, identify which designation applies to the site and comment on the status of communications, if any, between the owner and Pima County regarding the County's potential acquisition of the property.

This Property is not included as a priority acquisition for either Habitat Protection or Community Open Space.





2. Species-Specific Information

Cactus Ferruginous Pygmy-owl

Does the proposed project site occur within Survey Zone 1 for the cactus ferruginous pygmy-owl?

No.

Has the proposed project site been surveyed for pygmy-owls? If yes, disclose the dates when surveys were done and provide a summary of the results. If no, are surveys planned in the future?

No. The Property has not been surveyed for pygmy-owls; there are no surveys planned in the future.

Western Burrowing Owl

Does the proposed project site occur within the Priority Conservation Area for the Western Burrowing Owl?

No.

Has the proposed project site been surveyed for burrowing owls? If yes, disclose the dates when surveys were done and provide a summary of the results. If no, are surveys planned in the future?

No. The Property has not been surveyed for Western Burrowing Owls; there are no surveys planned in the future.

Pima Pineapple Cactus

Does the proposed project site occur within the Priority Conservation Area for the Pima pineapple cactus?

No.

Have Pima pineapple cactus been found on the proposed project site?

No. No Pima pineapple cacti have been found on the Property.

Has the proposed project site been surveyed for Pima pineapple cactus? If yes, disclose the date when surveys were done and provide a summary of the results. If no, are surveys planned in the future?

No. The Property has not been surveyed for Pima pineapple cactus; no surveys are planned in the future.

Needle-Spined Pineapple Cactus

Does the proposed project site occur within the Priority Conservation Area for the needlespined pineapple cactus?

No.

Have needle-spined pineapple cactus been found on the proposed project site?

No needle-spined pineapple cactus have been found on the Property.

Has the proposed project site been surveyed for needle-spined pineapple cactus? If yes, disclose the date when surveys were done and provide a summary of the results. If no, are surveys planned in the future?

No. The Property has not been surveyed for needle-spined pineapple cactus; no surveys are planned in the future.

3. Inventory of Saguaros

There are thirty-one (31) saguaros on the Property. Nineteen saguaros occur on Parcel A. They are in the area on the northern part of the Property that will remain undisturbed. There are nine (9) saguaros under 6'-0" and ten (10) saguaros over 6'-0". The locations of these saguaros are shown on *Exhibit IV.D.3.a: Parcel A Vegetative Communities*.

The remaining saguaros occur in the northwest portion of Parcel B amongst the existing residential buildings on Lot 1. There are no saguaros under 6'-0" and twelve (12) saguaros over 6-0" on Parcel B. (See *Exhibit IV.D.3.b: Parcel B Vegetative Communities.*)

4. Vegetative Communities

As shown on *Exhibits IV.D.3a* & *b*, there are two native vegetative communities and one non-native, previously disturbed vegetative community on the Property.

a. Riparian Habitat

One native vegetative community is Riparian Habitat, classified as Hydro/Meso Riparian by the County. This is found in the southeast corner of the Property. The existing habitat includes some large older mesquites. This area is approximately 0.9 acres or 0.5% of the Property.

The existing habitat on Parcel B includes a mesquite bosque, as well as some large hydroriparian trees such as cottonwood and hackberry. The hydroriparian vegetation was associated with a previous small pond on Parcel B. The two areas encompass approximately 1.0 acres.

b. Regulated Riparian Habitat

Pima County MapGuide includes mapping for IRA and Hydro/Meso Riparian Areas on both Parcels A and B. One area is located on the boundaries of both parcels, and while mapped Hydro/Meso Riparian, it does not contain any vegetative resources and does not convey any significant drainage. This area is not included in the CLS mapping.

Other regulated riparian habitat is mapped Hydro/Meso Riparian and IRA on the CLS. Much of this area has been previously disturbed.

c. Sonoran Desert Upland Habitat

The other native vegetative community is categorized as Sonoran Desert Paloverde/Saguaro upland and is approximately 2.0 acres or 11% of Parcel A and approximately 0.25 acres or 2% of Parcel B. All of this habitat type will remain undisturbed.

d. Non-Native Vegetation and Disturbed Areas

The vast majority of the Property has had previous disturbance. A significant amount of Parcel A has been a grass pasture for the past twenty-plus years. This includes the area on the west side of the Parcel A that is mapped as Hydro/Meso Riparian Habitat, although no riparian habitat exists. This previously disturbed area is approximately 17.8 acres or 88.5% of Parcel A. (See *Exhibit IV.D.3.a: Parcel A Vegetative Communities.*)

Most of Parcel B has also been disturbed for many years. There are several large non-native trees on site including Eucalyptus sp. and Pinus sp. The non-native and disturbed area for Parcel B is approximately 12 acres or 91 % of Parcel B. (See *Exhibit IV.D.3.b: Parcel B Vegetative Communities.*)





E. Transportation

1. Roadway Inventory

This section provides a description of the major roadways within a one-mile area of the Property. *Table IV.E.1* provides a physical inventory of the study area roadways. *Exhibit IV.E.1: Existing Transportation Network* shows the roadway system within one mile of the Property.

a. Craycroft Road

Craycroft Road is a north/south arterial road with a five-lane cross-section near the Property. There are two travel lanes in each direction with a two-way left turn lane from approximately 270 feet north of the main Craycroft Road Project entrance to the south. North of this section, Craycroft Road has a raised median north to River Road. There is a bike lane on each side of the roadway. Curbs and sidewalk and walls exist along both sides of the road. The posted speed limit is 45 mph north of Gregory School Road and 40 mph south of Gregory School Road.

b. River Road

River Road is an east/west arterial road approximately 870 feet north of the Property access on Craycroft Road. It is a two-lane roadway with a posted speed limit of 35 mph. There are sidewalks, curb and gutter and bike lanes on the south side of the road near Craycroft Road.

c. Main Access Road

Main Access Road is a private road providing access to the Craycroft Trailhead/The Loop as well as to a number of residential lots. The Main Access Road is narrow and would need to be widened to a two-lane cross section to accommodate the access for Endeavour.

d. Camino Blanco

Camino Blanco is a north/south local road providing access to residential and institutional uses south of River Road. It continues from River Road south for about ¾ mile to its intersection with the unpaved River House Road. There are no curbs, sidewalks or bike routes.

e. Swan Road

Swan Road is a north/south arterial road with a four-lane urban cross-section about one mile west of the Property. There are two travel lanes in each direction with a raised median. There is a bike lane on each side of the roadway. Curbs and gutter exist along both sides of the road. The posted speed limit is 45 mph north and south of River Road. f. Glenn Street

Glenn Street is an east/west collector road about one mile south of the Property. Glenn Street has a three-lane cross-section west of Craycroft Road and a twolane cross-section east of Craycroft Road. There is one travel lane in each direction with a two-way left turn lane west of Craycroft Road. Approximately ½ mile west of Craycroft Road, Glenn Street transitions to a two-lane road. There is a bike lane on each side of the roadway. Curbs and gutter exist along both sides of the road. There are intermittent sidewalks on both sides of the roadway. The posted speed limit is 25 mph east and west of Craycroft Road.

Roadway Segment	Road Classification	Existing Rights of-Way	# Lanes	Posted Speed Limit	Bike Facilities	Pedestrian Facilities	Bus Route	Public Roadway Improvements Within Five Years	Recorded ADT	Year
Craycroft Road, North of River Road	Medium Volume Arterial (PC)	140'-210'	4	45	Bike Route with Striped Shoulder	Sidewalk, West Side	No	No	30,151	2019
Craycroft Road, North of Project Driveway	Arterial Street (COT)	150'	4	45	Bike Route with Striped Shoulder	Sidewalk	No	No	37,603	2020
Craycroft Road, South of Project Driveway	Arterial Street (COT)	135'-150'	4	40	Bike Route with Striped Shoulder	Sidewalk	No	No	37,545	2020
River Road, East of Craycroft Road	Low Volume Arterial (PC)	100'-125'	2	35	Bike Route with Striped Shoulder	Sidewalk, South Side	No	No	16,017	2019
River Road, West of Craycroft Road	Low Volume Arterial (PC)	80'-145'	2	30	Bike Route with Striped Shoulder	Na	No	Na	13,920	2019
Camino Blanco, South of River Road	Local Road	50'	2	25	No	No	No	No	220	2018
Swan Road, South of River	Medium Volume Arterial (PC)	135'-145'	4	45	Bike Route with Striped Shoulder	No	No	No	27,125	2019
Glenn Street, West of Craycroft	Collector Street (COT)	60'-75'	2	25	Bike Route with Striped Shoulder	Sidewalk, South Side	Sun Tran Route 34 (Craycroft/ Ft. Lowell)	No	6,600	2019

Table IV.E.1: Roadway Inventory

Notes:

All Daily Counts from Pima Association of Governments (PAG) website or collected by Field Data Services (FDS).

Daily Count on Camino Blanco estimated from Peak Hour counts collected by Field Data Services at River Road/Camino Blanco.



2. Distances to Existing Drives/Intersections

The distances from the Craycroft Road access to the nearest driveways and intersections are shown in *Exhibit IV.E.4* and described below.

- a. North of Craycroft
 - Next Driveway North (East Side of Craycroft): 260 feet
 - Quick Trip Driveway (East Side): 550 feet
 - River Road: 970 feet
- b. South of Craycroft
 - South Bank Loop Access (West Side): 1,130 feet
 - South Bank Loop Access (East Side): 1,190 feet
 - Castlehill Country Day School, North Driveway (West Side): 1,390 feet
 - Castlehill Country Day School, South Driveway (West Side): 1,510 feet
 - Gregory School Entrance (West Side): 1,820 feet
- 3. Public Transit

There are no fixed transit routes on Craycroft Road or on River Road in the vicinity of the Property. The closest Sun Tran fixed route is Route 34 (Craycroft/Fort Lowell), which has a stop at the corner of Glenn Road/Craycroft Road, approximately 0.9 miles south of the Project Craycroft access, and Route 105X (Foothills-Downtown Express), and express route that has a stop at the corner of Swan Road/River Road, approximately 1.5 miles from the Project Craycroft access.

The Property is located within the eligibility area for the Sun Shuttle Dial-A-Ride service. This service provides reservation pickup service for disabled individuals who live within the special-needs eligibility area in Pima County.



F. Utilities

1. Sewer

a. Parcel A

Sanitary sewer service for Parcel A is provided by PCRWRD via an existing 30-inch sewer main located along the northern edge of Parcel A. This sewer main was constructed in 1968 and conveys waste flows to the west within existing public sewer infrastructure running parallel with the Rillito River.

Redevelopment of Parcel A requires analysis of any impacts to the existing sewer infrastructure and could require additional structures and/or laterals within the existing alignment. The public sewer main will not be in jeopardy of any re-work due to its location along the northern boundary in parallel with Parcel A's public water infrastructure. Currently the existing public sewer has capacity available for an increase of at least 34,000 gallons-per-day of flow, based on a recent capacity request response received from PCRWRD. (See *Exhibit II.K.1.a: Parcel A Wastewater Capacity Response Letter* included in previous section.) This flow allocation was estimated based on a 21-acre mixed-use development.

The locations of existing utilities on Parcel A are depicted on *Exhibit IV.F.1: Parcel A Existing Utilities*.

b. Parcel B

Sanitary sewer service for Parcel B is provided by PCRWRD via an existing 30-inch sewer main running through the middle of Parcel B and an existing 8-inch sewer main in the northwest corner of Parcel B. This sewer main was constructed in 1968 and conveys waste flows to the west within existing public sewer infrastructure running parallel with the Rillito River.

Redevelopment of Parcel B requires analysis of any impacts to the existing sewer infrastructure and could require additional structures and/or laterals within the existing alignment. The public sewer main will not be in jeopardy of any re-work due to its location along the future access drive for the development. PCRWRD indicates capacity for a new 22-lot residential development is available. (See *Exhibit II.K.1.b: Parcel B Wastewater Capacity Response Letter* in Section II of this Specific Plan.)

The locations of existing utilities on Parcel A are depicted on *Exhibit IV.F.2: Parcel B Existing Utilities*.





2. Water

a. Parcel A

Currently Parcel A is serviced for potable water by Tucson Water. The existing water system consists of a 6-inch water main accessing Parcel A from the northeast and carrying water from the east along its northern boundary. This existing asbestos cement water main was constructed in 1968 to serve the residential users on N. Craycroft Road and E. River House Road.

Development of Parcel A requires attention to the existing water system and could require relocations and/or modifications depending on where new development areas occur and what water infrastructure is needed. Discussions with Tucson Water has revealed that the current system pressure in the existing main off N. Craycroft Road is in the range of 115 psi, which would provide ample pressure and fire flow for any future development. However, fire flow requirements and detailed site-specific modeling by Tucson Water will be required to determine if any modifications to the existing system will be required.

The locations of existing utilities on Parcel A are depicted on *Exhibit IV.F.1: Parcel A Existing Utilities*.

b. Parcel B

Currently the site is serviced for potable water by Tucson Water. The existing water system consists of a 6-inch water main accessing the site from the east and carrying water from the east through the middle of Parcel B. This existing asbestos cement water main was constructed in 1968 to serve the residential users on N. Craycroft Road and E. River House Road

Development of Parcel B requires attention to the existing water system and could require relocations and/or modifications depending on where new development areas occur and what water infrastructure is needed. Discussions with Tucson Water has revealed that the current system pressure in the existing main from N. Craycroft Road is in the range of 115 psi, which would provide ample pressure and fire flow for any future development. However, fire flow requirements and detailed site-specific modeling by Tucson Water will be required to determine if any modifications to the existing system will be needed.

The locations of existing utilities on Parcel A are depicted on *Exhibit IV.F.2: Parcel B Existing Utilities*.