

- Indicate by notes the existing drainage pattern and proposed drainage plans for handling on-site and off-site storm water runoff
- Indicate location, type, height, and materials for proposed walls, fences, and signs.
- Location and types of existing and proposed landscaping.
- Designated Flood Zone



2. Quantitative Development Data Tables

- Land Use table to include:
 - Total Gross Acreage of site
 - Total Area of Streets (Public & Private)
 - Total Area of Public Open Space
 - Total Net Area of all intended uses
 - Total Areas of Open Space for PAD Residents, and total Recreation Area Open Space
 - Total Dwelling Units permitted under base zoning district
 - Total number of each dwelling type including range and mixture of lot sizes within each base zone
 - Grand Total of Dwelling Units
 - Overall Density proposed
- Zoning Comparison Table of Existing & Proposed to include:
 - Lot area per dwelling unit
 - Setbacks
 - Minimum Lot Widths
 - Maximum Building Heights
- Parking (number of spaces)
- Utility & Services Table indicating type and source:
 - Sewer
 - Electric
 - Telephone
 - Water
 - Police/Security
 - Fire
 - Schools
 - Solid Waste Disposal
- Street Type Table indicating proposed rights-of-way and pavement widths for arterials, collectors, and neighborhood streets.



3. Submit an Open Space & Recreation Plan ("OSRP") that includes – Refer to Chapter 2.176

Reviewed the Pinal County Open Space & Recreational Area Guideline

Site Analysis

- Aerial Photo
- Preferred scale of 1"=50' (*maximum scale of 1"=100'*)
- Site Analysis should be produced in an **8½" X 11" format for text**
- Site Analysis should be produced in an **24" X 36" format for plans*** (**coordinate this requirement with your case coordinator**)

Total acreage of proposed development

Context Map showing the proximity and relationship to the County's trails, parks, or schools and connectivity to the adjacent neighborhoods, off-site trails, paths, bikeways, and transit areas.

A concept drawing of the proposed development including:

- Gross Site Area
- Number of proposed lots
- Proposed Arterial & Collector street circulationsystem
- Proposed lot size(s),
- Proposed Retention/detention areas
- Proposed Development Phasing

Context Map showing the proximity and relationship to the County's trails, parks, or schools and connectivity to the adjacent neighborhoods, off-site trails, paths, bikeways, and transit areas.

A concept drawing of the proposed development including:

- Gross Site Area
- Number of proposed lots
- Proposed Arterial & Collector street circulationsystem
- Proposed lot size(s),
- Proposed Retention/detention areas
- Proposed Development Phasing

A pedestrian circulation system

A Slope Analysis identifying the following slope categories:

- 1) 0% - 5%
- 2) 5% - 10%
- 3) 10% and greater

- Identification of wash corridors and preliminary hydrologic information for the contributing watershed.
- Identification of the location of riparian vegetation and biological habitats. Aerial photos should be used to map the limits of notable vegetation.
- Identification of potential view corridors
- Identification of the projected 100-year floodplain and floodway boundary as required by FEMA.
- A record check through Arizona State Museum (“ASM”) for archeological sites and identification of any sites or surveys
- The location and percentage of each proposed development to be preserved as conservation open space and the features to be protected including parcel size and minimum dimensions
- The location and percentage of each proposed development to be preserved as developed open space and the specific Recreation Areas, including amenities, parcel size and minimum dimensions.



4. Submit a Landscape Plan that includes – *Refer to Chapter 2.176.240 (C) of the PCDSC:*

- A Vegetation Salvage Plan
- Proposed treatment of all ground surfaces (paving, turf, gravel, grading, etc.)
- Extent and location of all plant materials and other landscape features.
- Extent of decorative design elements such as fountains, pools, benches, sculptures, planters, and similar elements.
- Location of Water Outlets.



5. Submit a report utilizing the Arizona Game and Fish ERT online review tool for Habitat and Riparian area identification.



Reviewed, Met, and/or addressed the following in Chapter 2.176 of the PCDSC:

- Minimum requirements for Open Space – (Section 130)
- Uses permitted within open space areas – (Section 140)
- Uses prohibited within open space areas – (Section 150)
- Minimum requirements for recreation areas – (Section 160)
- Minimum requirements for multi-use paths and trails – (Section 170)
- Minimum requirements for storm water retention & detention basins – (Section 180)
- Minimum requirements for streetscapes & entryways – (Section 190)
- Minimum requirements for conservation open space – (Section 200)

- Submit a Master Sign Plan** detailing the location and type of all proposed signage for the project. *(signage must be approved under separate permit, the PAD document cannot alter development standards for signs)*
- Submit a Preliminary Drainage Report***
- Submit a Preliminary Traffic Impact Assessment (TIA)*** (Your TIA must be approved prior to scheduling of your Public Hearing)
- Submit** a copy of a certified **A.L.T.A.** survey, including a legal description of the PAD boundary and legal descriptions of all zoning district boundaries
- Aware** that earth fissure maps are available online from the Arizona State Geologic Survey.
- Submit a list of all property owners within 600' (feet)** of the subject property boundary showing name, mailing address and tax parcel numbers. This list must be obtained within 30 days prior to application submission. A map showing the 600' boundary and parcels must be included as well (A Tax Assessor Parcel Map is Acceptable). - ***(This list is a separate list from the "Neighborhood/Community Meeting list of 1,200' however use Page 5 of this application).***
- Submit** separate preliminary reports or master plans for:
 - Storm water drainage
 - Wastewater & Domestic water service.
- Submit** additional materials required for specific types of commercial and industrial uses as follows *(as applicable)*:
 - Commercial Uses:**
 - Retail sales floor area and total area proposed for commercial development
 - Type of uses proposed
 - Industrial Uses**
 - Total Area proposed for industrial uses
 - Types of uses proposed
 - Anticipated employment for development per major phases
 - Standards of:**
 - Height
 - Open Space
 - Buffering

- Landscaping
- Pedestrian & Vehicular circulation
- off-street parking & Loading (the PAD document cannot alter minimum requirements for parking)
- Signs (the PAD document cannot alter the maximum amount of signage)
- Nuisance Controls



Complete and Submit the “Comprehensive Plan Compliance Checklist”

Included in Project Narrative.



Non-Refundable filing fee for a Planned Area Development & Non-Refundable Public Works Fees



Submit one (1) hard copy of all documentation outlined in the PAD application and one **(1) digital copy** in a multi-PDF format per item of the application with all supporting documentation on **one (1) CD**. ****Your application can also be submitted digitally via email or FTP site please call or email the Planning Division for more information.**



Submit one (1) CD which contains:

- An ESRI shapefile for land use (conceptual) which shows all proposed zoning lines and zoning classifications for the project in NAD_1983_stateplan_arizona_central_fips_0202_intlfeet projection

OR

- An AutoCAD (.dwg file), which includes the following layers:
 - Parcel
 - Right-of-way
 - Sub-perimeter
 - Centerlines
 - Section Lines
 - Street names
 - Lot-numbers
 - Distances & Bearings tied by course and distance to two Pinal County survey control points or established city or county survey monuments.
(Information on these control points can be obtained from Public Works, Engineering Technicians at 520-866-6411).



Aware to Install Broadcast Notification Sign(s) on the site in conformance with the information shown in this application. *(See page 16 of this application for illustrative details).*

- Aware** that all newspaper advertising fees must be paid by the applicant in addition to application fees.

- Aware** that all public works fees are due at application submittal and for each subsequent submittal

- Aware** that on property owner notifications that exceed 30 mail outs the applicant will be responsible for notice prep and postage

- Aware** that this application will be submitted to AZGF Department for review and analysis with the ERT online review tool for Habitat and Riparian area identification.

- Signature at the end of the **“Checklist”** stating you have reviewed and addressed all areas within it.

I certify that I have submitted all the required information listed above, and I understand that this application for a Planned Area Development cannot be processed until all required information is submitted

Mario Mangiamele, AICP Digitally signed by Mario Mangiamele, AICP
Date: 2021.09.22 12:55:49 -07'00'

Signature

Date



This letter is being sent to all property owners within the San Tan Heights community as well as those within 1,200 feet of the Planned Area Development (PAD) boundary to notify you of the subject site's landowner's intent to propose a development plan to Pinal County for the purposes of developing the approximate 100-acre site located along the south side of Hunt Highway between Thompson Road and Mountain Vista Blvd. The current ownership, who has owned the land since 2003, is intending to develop a mixed-use project that includes commercial, multi-family, and single family uses. Specific uses and/or users are not known at this time as we are very early into the development process.



The property currently has a Comprehensive Plan land use classification of Community Center with underlying zoning of CB-2 (commercial) and CR-4 (residential). The CB-2 and CR-4 zoning districts are no longer being used by the County so we propose to use the zoning designations of C-2 (commercial) MR (multi-family) and R-7 (single-family). A PAD overlay is also proposed which is consistent with the existing entitlement. Since the Community Center land use classification does not allow single family uses, we are proposing a minor Comprehensive Plan Amendment for a ~25-acre portion of the project, replacing the Community Center land use classification with Urban Transitional. The result of this proposal will allow the development of ~25 acres of commercial uses, ~50 acres of multi-family uses, and ~25 acres of single family uses (see attached concept plan).

We are preparing a formal application to be submitted to Pinal County sometime in July and as such, wanted to present our intentions to the area residents via this letter, but also via an in-person meeting/presentation (info below). This is a very preliminary meeting, meaning we do not have detailed plans or information about who the end users will be, how soon uses will be built, or even what they will

look like. That said, we do invite your questions and comments via email or in person. The presentation will be held:

Thursday, July 1st at 6:00 PM
San Tan Heights Community Center – Hibiscus Room
32805 Occidental Ave. San Tan Valley, AZ 85142
(enter parking lot through SOUTH gate - off of Occidental)

This notification was sent to over 5,000 property owners and since we will not be able to accommodate everyone's questions and/or comments at the in-person meeting, we welcome you to send them to me via email at Greg@iplanconsulting.com. All questions and comments received will be responded to and included in the public record package submitted to the County. In addition, below is a FAQ which may address questions you have.

1. Why not build all 100 acres as commercial?

The property owners are commercial developers and have been marketing this site for 17 years now and recognize that 100 acres is far too much commercial to absorb in our post-Amazon, post-COVID world. They have been working with commercial brokers to determine the maximum amount of commercial that is viable due to the existing and planned multi and single family developments surrounding the site.

2. Will this project be part of the San Tan Heights HOA?

No...this project is not part of the HOA and will have no impact to the HOA.

3. What is being done regarding the traffic that will be produced by this project?

We will be preparing a Traffic Impact Analysis (TIA) which the County will review and determine what impact this project will have on existing traffic and how to mitigate that impact.

4. What road improvements will be made with this project?

The County will actually determine what improvements are required, but we fully expect to improve Hunt Highway along our frontage and build San Tan Heights Blvd. from Hunt Highway to where it currently stops.

5. What type of commercial uses are expected?

At this early stage we don't have any uses on board yet, but we anticipate a typical neighborhood level commercial development which would include a grocer anchor, several in-line suite users, and multiple pads along Hunt highway for restaurants and retail stores.

6. What type of multi-family uses are expected?

We are working with multi-family developers that build lower intensity 1 & 2 story homes/units for rent in a style similar to a Christopher Todd or NexMetro communities.

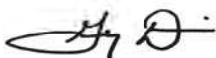
7. What size of homes are planned for the single-family use?

We are planning for homes and lot sizes to be consistent with the adjacent neighborhoods...40-55 foot wide by 100-120 feet deep lots with homes ranging from 1,200 – 2,000 square feet.

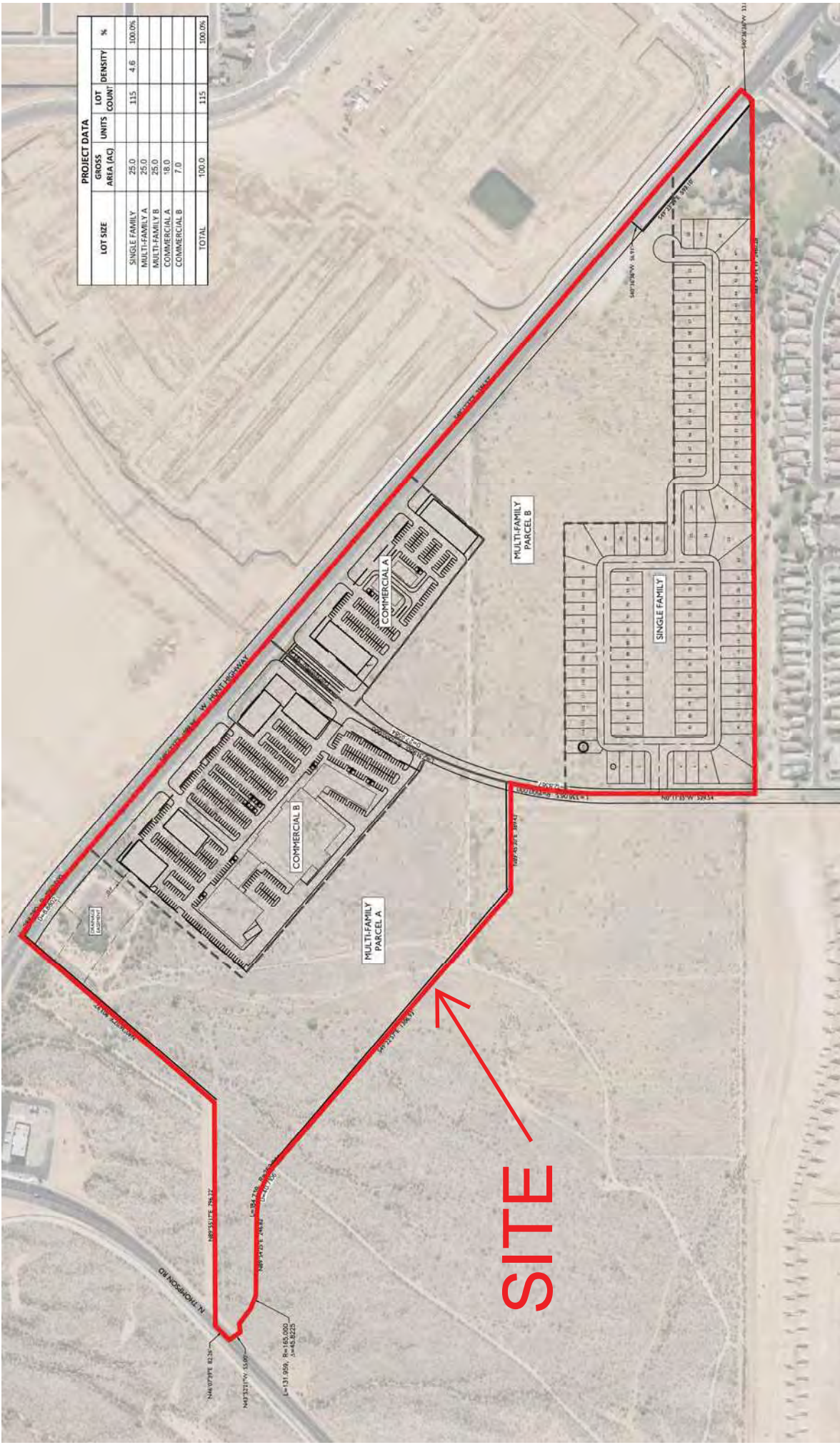
8. What is the timing of the project?

We expect the site construction to start in early 2023 and build out will be determined by the market absorption of each land use.

Sent on behalf of the landowner,



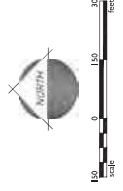
Greg Davis
Entitlement Consultant



PROJECT DATA			
LOT SIZE	GROSS AREA (AC)	UNITS	LOT DENSITY %
SINGLE FAMILY	25.0	115	4.6
MULTI-FAMILY A	25.0		
MULTI-FAMILY B	25.0		
COMMERCIAL A	18.0		
COMMERCIAL B	7.0		
TOTAL	100.0	115	100.0%



05.19.2021



Conceptual Layout 3

Pinal County

Borgata at San Tan Valley



Borgata Sky/Hi Neighborhood Meeting Summary:

San Tan Heights Community Center – July 1, 2021

Attendees:

Moderator: Greg Davis – Iplan Consulting

Moderator: Mario Mangiamele – Iplan Consulting

Neighbors: See Sign-in Sheet

Meeting started at approximately 6:10PM.

Mr. Davis welcomed everyone to the meeting, explained that the purpose of the meeting was to inform the area residents about the proposal and solicit questions and/or comments. Mr. Davis then explained what the existing entitlements allowed for, what the proposed entitlements were (including the minor Comp Plan amendment, PAD rezoning, and future Site Plan), what they allowed for, and the process for the proposed entitlements to be reviewed and improved. Lastly, Mr. Davis explained the timeframes associated with each step and the multiple opportunities the area residents would have to provide further commentary. Mr. Davis then opened the meeting for questions and/or comments:

1. RV/Boat Storage – where are they allowed?
 - *We believe currently permitted in Commercial and Industrial zoning designations.*
2. Difference between single family and multi-family?
 - *Generally land ownership – single family detached and single family attached often involves fee simple land ownership – multi-family generally does not include land ownership – property owned and managed by one entity.*
3. Timing for addressing fissures?
 - *Fissure study is underway. We know there are fissures in the area but unsure how they might impact this project.*
4. Where are you going to get water?
 - *Area has been planned for development for quite some time. We are working with EPCOR concerning water needs.*
5. What are you doing to preserve open space?
 - *Project is proposing over 25% open space and overall PAD initially contributed to access and development of San Tan Regional Park.*



6. What are you going to do about fissures long term as they appear to be growing? Also concerns with existing fissures within San Tan Heights community – nothing is happening to remediate. You are contributing to fissure issue by depleting groundwater. Multiple comments on existing, growing and future fissures.
 - *First step is a level 1 analysis – recommendations by fissure consultant will be provided.*
 - *If public safety issue – recommendations will typically be provided to address immediately.*
 - *We understand the significant concern you are raising and will address it.*
7. What about traffic and signals (light at Thompson?).
 - *County requires a TIA which will take in ambient traffic as well as traffic generated by this proposal and County will make recommendations as to appropriate improvements...including a signal at San Tan Village Parkway and Hunt Hwy.*
8. Are you going to have your own HOA?
 - *Yes, or Property Owners Association.*
9. Where are you connecting for water? Are you using Mountain Vista Lake for irrigation?
 - *Not to our knowledge, we believe connections may be within Hunt Hwy. Further analysis is needed and ongoing.*
10. Will our buffer go away – reference made to open space adjacent to existing residential on property boundary?
 - *No – The identified buffer/open space is on STH property...not ours.*
11. When is traffic study going to be conducted? Traffic counts need to be performed during school, when winter visitors are here, etc., for a more accurate study.
 - *We are currently analyzing the traffic per the County's requirements. We can't wait until fall to perform the study. That said, existing studies do include year round data.*
12. Will the meeting summary be provided to neighbors?
 - *We will provide a meeting summary document and include it with our formal rezoning application to the County. That package is a public document so you will have access to it.*



13. Existing traffic on Hunt Hwy. is an issue.
 - *Understood. We will have a TIA to assess the traffic situation and the County may require on and offsite road improvements to help mitigate traffic.*

14. San Tan Valley Plan – 2018 – what is your reason from pivoting from San Tan Valley plan? Supposed to be a very special place – you have opportunity to make this – heart and soul of area. Queen Creek Marketplace is 90-acres. Please come back with something that is regional draw – hate to see more rooftops.
 - *We believe we are compliant with the STVP which does support commercial and multi-family uses. We do acknowledge that we are requesting to change 25-acres of the STVP for the single-family homes which we believe provide a valuable buffer to the existing homes. We can only meet the market demand and cannot speculatively build for uses that are not interested in this area.*

15. Need more employment opportunities – not fast food.
 - *We understand and agree, but again, we don't "make" the market...we only can meet it. Our desire is to develop as much employment and commercial property as is viable, but we'd marketed the property for 12 years for those uses with little to no interest. With adding the rooftop density of the multi-family homes, we will be drawing in commercial users that aren't interested today.*

16. Need public gathering spaces – maintain mountain views. Owner is not vested in area. Community center is not a strip mall. Need to respect plan put in place. Need jobs.
 - We cannot commit to what the commercial portion of this project is going to look like at this time. All interest to date has been for small frontage pads which we have passed on. We want as notable a user as you do and we can design the project to offer gathering places so there is still a lot to be determined. That said, we are not the end users, nor are you. The County and the people/companies that are risking millions to build are the folks who get to decide specifically what uses/projects get built and which don't. We do commit to keeping the residents involved so this conversation can continue as more end user information is known.



17. What constitutes density?

- *People per acre – it's a ratio of how many homes/people live in an acre of space.*
- *Explained/summarized what companies typically look at in determining location.*

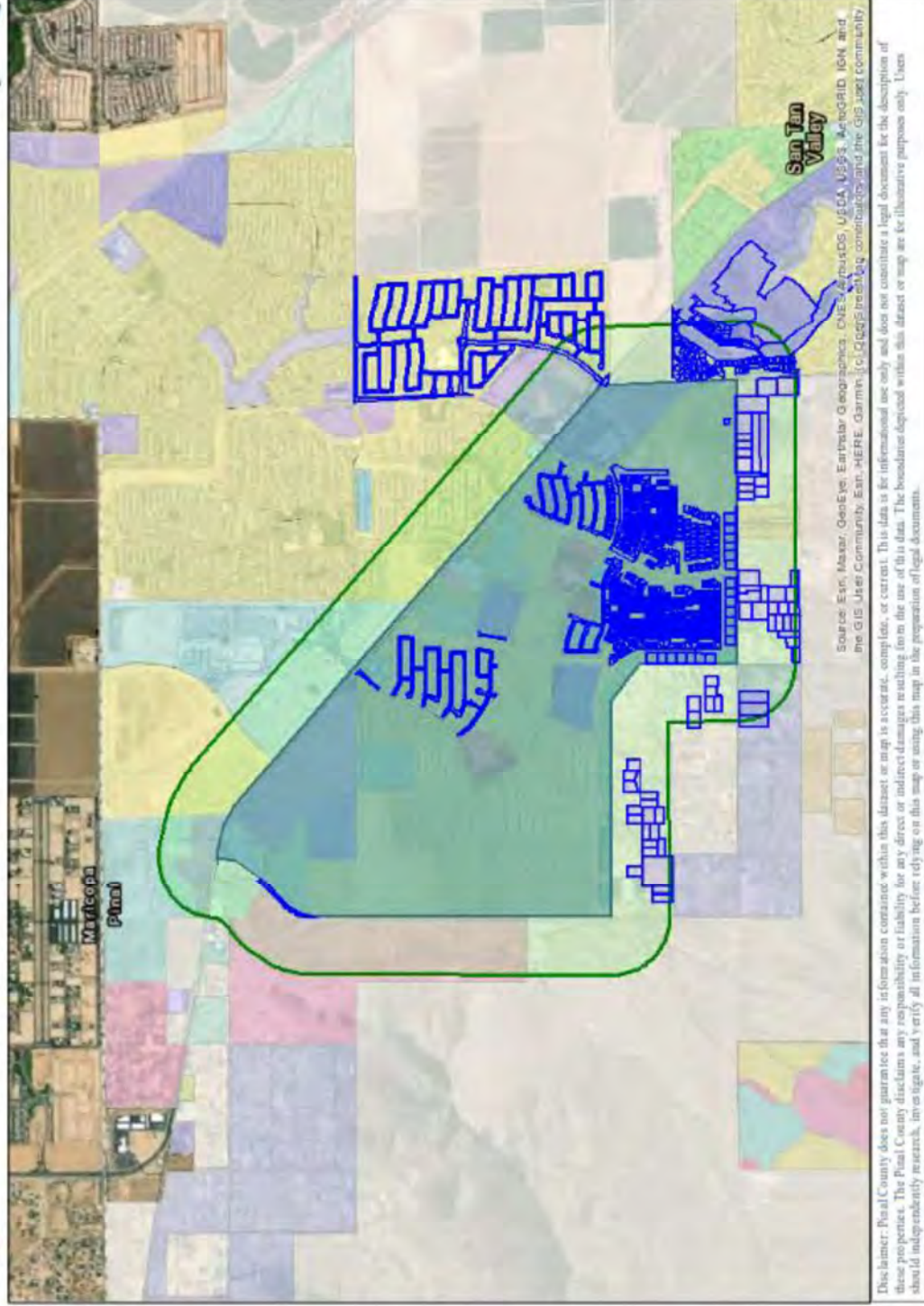
18. Will multi-family be Section 8?

- *No. No subsidized housing is proposed as part of this project.*

Seeing no other questions or comments, Mr. Davis adjourned the meeting and welcomed residents to stay involved in the process and contact him for future questions and/or comments.

Meeting adjourned at approximately 7:35PM.

NAME -- (please print)	ADDRESS	ZIP	EMAIL
DON PARHAM	3374 W MORGAN LN	85142	dparham@msn.com
ROBERT BRYANT	4137 W WHITE CANYON	85142	DJMACKEYSA@YAHOO.COM
PEG LYNCH			m.peg.lynch@gmail.com

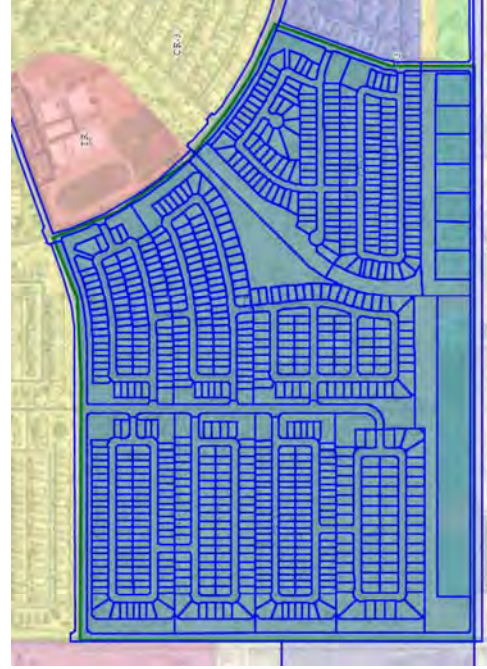
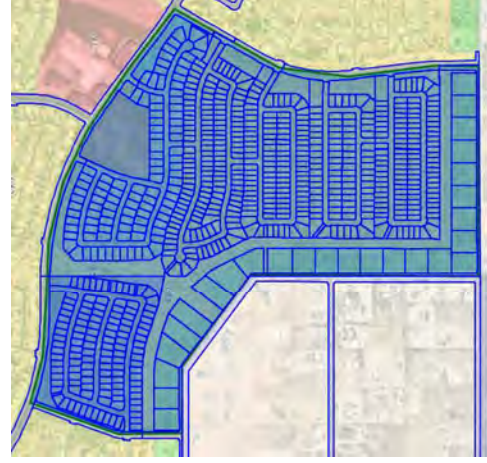
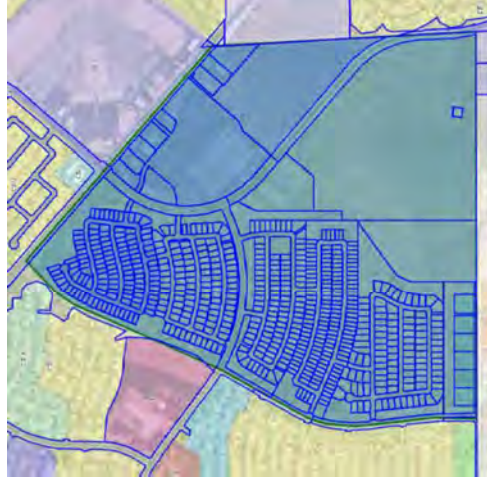
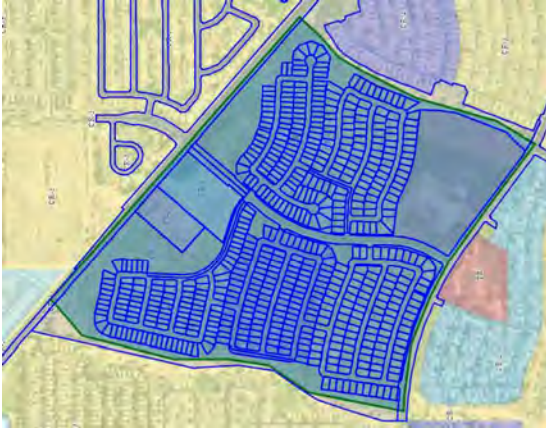


Pinal County GIS

The online Parcel Viewer's "Label and Address" tool functionality is limited to 1000 addresses per query and the San Tan Heights PAD, inclusive of a 1200' buffer, has well over 5000 addresses. This required carefully using the tool by selecting individual large sections of the PAD and running a series of maps and labels (7 onsite, 5 offsite) to ensure every parcel within the PAD and 1200' of its perimeter was entirely accounted for. The individual maps are shown on the following two pages for clarity and assurance that no parcels were omitted in this exercise and that all duplicates were eliminated to the extent possible.



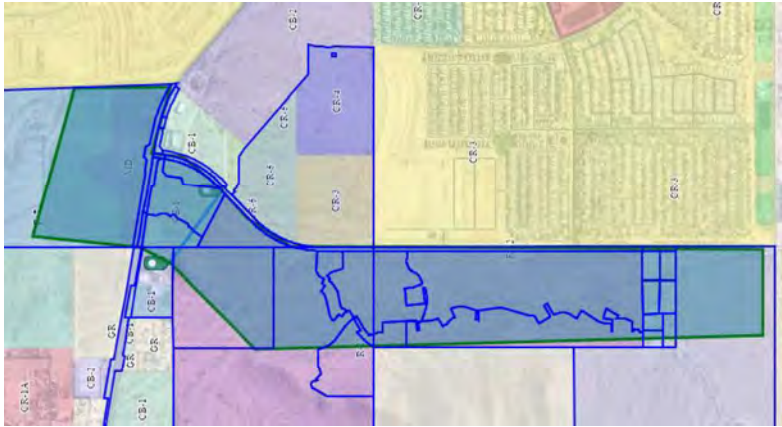
San Tan Heights PAD (onsite)



Iplan Consulting



San Tan Heights PAD 1200' Buffer Area (offsite)



Commitment

Fidelity National Title - Phoenix

File No.: 55002801

Introducing LiveLOOK

LiveLOOK title document delivery system is designed to provide 24/7 real-time access to all information related to a title insurance transaction.

Access title reports, exception documents, an easy-to-use summary page, and more, at your fingertips and your convenience.

[To view your new Fidelity National Title LiveLOOK report, Click Here](#)



Effortless, Efficient, Compliant, and Accessible

APPLICATION FOR THE ISSUANCE OF CONDITION OF TITLE REPORT

Applicant is in the process of investigating the Ownership of and defects, liens and encumbrances against an Interest in Land. As a component of that investigation, Applicant hereby requests the Company to furnish Applicant with a Report based upon the hereinafter defined Title Instruments, which Report will disclose the Ownership of and defects, liens and encumbrances against the hereinafter identified Interest in the hereinafter described Land. Applicant does not at this time need nor desire the benefit or protection afforded by a Policy of Title Insurance. The Report provided will be solely for the purpose of facilitating Applicant's investigation and for the sole use and benefit of Applicant and may not be used or relied upon by any other party.

1. The following terms when used in the Application and the Report shall mean:
 - a. Applicant – The party or parties who have executed this Application and who are named in the Report.
 - b. Company – The Title Insurance Company making the Report.
 - c. Report – Condition of Title Report.
 - d. Land – The real property described in the Application.
 - e. Interest – The Estate in the Land described on the Application.
 - f. Ownership – The Vesting of title to the Interest identified in the Application.
 - g. Title Instruments:
 1. Documents recorded in the Office of the County Recorder of the County in which the land is located reviewed by the Company to facilitate the Company's issuance of title insurance policies excluding therefrom, however, any documents pertaining to (a) unpatented mining claims, (b) patents, (c) water rights, claims or title to water, (d) the lease, grant, exception or reservation of minerals or mineral rights.
 2. Documents, obtained by the Company to facilitate the issuance of title insurance policies, relating to the payment of Real Estate Taxes levied on the Interest in the Land excluding therefrom, however, any special assessments which are not collected by the Tax Collector for the County in which the Land is located.
2. The Land is described as follows:

See Exhibit A attached hereto and made a part hereof.
3. The Interest in the Land is a:
 - a. Fee
 - b. Leasehold created by _____
 - c. Other _____
4. Applicant specifically instructs the Company to set forth in the Report only the Ownership of and defects, liens and encumbrances against the Interest in the Land as disclosed by the Title Instruments. Applicant understands that during the course of preparing the Report, the Company may become aware of other matters pertaining to the Land or other Interests therein. Even if the company knows or would have reason to know Applicant may have an interest in these other matters, Applicant imposes no duty or responsibility on the Company to disclose those matters to Applicant either through the Report or otherwise.
5. BY THE EXECUTION AND SUBMISSION OF THIS APPLICATION TO THE COMPANY, APPLICANT ACKNOWLEDGES AND AGREES:

- a. That the Company's sole obligation under the Report, and this Application, shall be to set forth the Ownership of and defects, liens and encumbrances against the Interest in the Land as disclosed by the Title Instruments.
- b. That the Company shall not be obligated under this Report to pay costs, attorneys' fees, or expenses incurred in any action, proceeding, or other claim brought against Applicant.
- c. That the Report is not an abstract of title, title opinion, preliminary report or commitment to issue title insurance.
- d. That the Company's liability under the Report for an error or omission is, as stated below, limited and that if Applicant desires that the Company assume additional liability, a Policy of Title Insurance, Binder, Commitment, or Guarantee should be requested.
- e. That Applicant shall have no right of action against the Company, whether or not based on negligence, except under the terms and provisions of, and subject to all limitations of this Application and the Report.
- f. That the Report is not valid and the Company shall have no liability thereunder unless this Application is attached thereto.

LIMITATION OF LIABILITY

APPLICANT RECOGNIZES THAT IT IS EXTREMELY DIFFICULT, IF NOT IMPOSSIBLE, TO DETERMINE THE EXTENT OF LOSS WHICH COULD ARISE FROM ERRORS OR OMISSIONS IN THE REPORT. APPLICANT RECOGNIZES THAT THE FEE CHARGED IS NOMINAL IN RELATION TO THE POTENTIAL LIABILITY WHICH COULD ARISE FROM SUCH ERRORS OR OMISSIONS. THEREFORE, APPLICANT UNDERSTANDS THAT THE COMPANY IS NOT WILLING TO PROCEED IN THE PREPARATION AND ISSUANCE OF THE REQUESTED REPORT UNLESS THE COMPANY'S LIABILITY IS STRICTLY LIMITED. APPLICANT AGREES WITH THE PROPRIETY OF THIS LIMITATION AND AGREES TO BE BOUND BY ITS TERMS.

THIS LIMITATION IS AS FOLLOWS:

APPLICANT AGREES, AS PART OF THE CONSIDERATION FOR THE ISSUANCE OF THIS REPORT, THAT THE COMPANY SHALL BE LIABLE TO APPLICANT UNDER THIS REPORT SOLELY BY REASON OF AN ERROR OR OMISSION BY THE COMPANY IN FAILING TO SET FORTH THE OWNERSHIP OF AND DEFECTS, LIENS AND ENCUMBRANCES AGAINST THE INTEREST IN THE LAND AS DISCLOSED BY THE TITLE INSTRUMENTS, WHICH ERROR OR OMISSION BY THE COMPANY HAS CAUSED LOSS TO THE APPLICANT; AND THEN THE LIABILITY SHALL BE A ONE-TIME PAYMENT TO APPLICANT OF FIVE THOUSAND DOLLARS (\$5,000.00).

ACCORDINGLY, APPLICANT REQUESTS THAT THE REPORT BE ISSUED WITH THIS LIMITATION AS A PART OF THE CONSIDERATION THAT APPLICANT GIVES THE COMPANY TO PREPARE AND ISSUE THE REPORT.

APPLICANT CERTIFIES THAT HE HAS READ AND UNDERSTOOD ALL OF THE TERMS, LIMITATIONS AND CONDITIONS OF THIS APPLICATION.

EXECUTED THIS _____ day of _____, _____ .

(This Application must be signed by the Applicant or an agent representing the Applicant.)

APPLICANT: _____
Print or Type Name

MAILING ADDRESS: _____

Signature

Telephone

AGENT FOR APPLICANT _____
Print or Type Name

MAILING ADDRESS: _____

Signature

Telephone



Fidelity National Title Insurance Company

Title No.: **AZ-FMPC-IMP-N/A-1-20-55002801**

CONDITION OF TITLE REPORT

Fidelity National Title Insurance Company, a Florida Corporation,
herein called the Company,

SUBJECT TO THE TERMS, LIMITATIONS AND CONDITIONS OF THE APPLICATION FOR THIS CONDITION OF TITLE REPORT, WHICH APPLICATION, OR COPY THEREOF, IS ATTACHED HERETO AND MADE A PART HEREOF

REPORTS

To the party named in Schedule A, that as disclosed by the Title Instruments, the ownership of and the defects liens and encumbrances against the Interest in the Land are as shown in Schedule B.

Any claim or other notice to the Company shall be in writing and shall be addressed to the Company at the issuing office or to:

*Fidelity National Title Insurance Company Claims Center
PO Box 45023
Jacksonville, Florida, 32232-5023
Attn: Claims Administration*

THIS REPORT IS NOT VALID AND THE COMPANY SHALL HAVE NO LIABILITY HEREUNDER UNLESS THE APPLICATION REFERRED TO ABOVE, OR COPY THEREOF, IS ATTACHED HERETO.

Countersigned by:

Natalie Bombardieri

Authorized Signature



By: *[Signature]*

ATTEST

President

[Signature]

Secretary

CONDITION OF TITLE REPORT

SCHEDULE A

Fee: **\$0.00**

Date of Report: **October 19, 2020 at 07:59 AM**

1. Name of Party:

to come

2. The Interest referred to in the Application is:

A FEE

3. The Land referred to in the Application is described as follows:

See Exhibit A attached hereto and made a part hereof.

Issuing agent for Fidelity National Title Insurance Company

EXHIBIT A

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF PINAL, STATE OF ARIZONA, AND IS DESCRIBED AS FOLLOWS:

PARCEL NO. 1: (509-02-926)

That portion of the South half of Section 2, Township 3 South, Range 7 East, of the Gila and Salt River Base and Meridian, Pinal County, Arizona, described as follows:

COMMENCING at the South quarter corner of said Section 2;

THENCE along the South line of said Section 2, South 89° 55' 21" West (South 89° 55' 23" West, record), 2651.57 feet to the Southwest corner of said Section 2;

THENCE North 00° 07' 01" East (North 00° 03' 18" West, record), of 704.93 feet along the monument line of Thompson Road, to the beginning of a tangent curve, concave Southeasterly and having a radius of 1200.00 feet;

THENCE Northeasterly along the arc of said curve, through a central angle of 23° 11' 49", a distance of 485.84 feet to a point on said curve at which the recorded monument line of Thompson Road diverges in a Northwesterly direction from the physical monumented centerline of said Thompson Road;

THENCE continuing Northeasterly along the arc of said curve, and along the physical monumented centerline of said Thompson Road, through a central angle of 22° 59' 03", a distance of 481.38 feet to a point on a tangent line;

THENCE North 46° 17' 53" East (North 46° 07' 29" East, record), along said parallel line, 522.15 feet;

THENCE North 89° 55' 17" East, 796.22 feet;

THENCE North 40° 46' 24" East, 904.32 feet to the physical centerline of the Hunt Highway, according to Declaration of Road No. 31, recorded in Book 7 of Minutes; page 195 of the Pinal County, Arizona Board of Supervisors and the beginning of a non-tangent curve, concave Southwesterly, the center of which bears South 29° 44' 09" West, 1100.00 feet;

THENCE Southeasterly along the arc of said curve, and along the physical centerline of said Hunt Highway, through a central angle of 01° 39' 01", a distance of 144.01 feet to a point of tangency;

THENCE South 49° 12' 37" East, along said tangent line and the physical centerline of said Hunt Highway, 1063.00 feet;

THENCE leaving said centerline, South 40° 46' 24" West, 283.42 feet to the beginning of a tangent curve, concave Southeasterly and having a radius of 1500.00 feet;

THENCE Southwesterly along the arc of said curve, through a central angle of 40° 47' 42", a distance of 1068.01 feet to point of tangency;

THENCE South 00° 01' 18" East, along said tangent line, 529.54 feet to the POINT OF BEGINNING.

PARCEL NO. 2: (509-02-929)

That portion of the Southeast quarter of Section 2, Township 3 South, Range 7 East, of the Gila and Salt River Base and Meridian, Pinal County, Arizona, described as follows:

COMMENCING at the Southeast corner of said Section 2;

EXHIBIT A
(Continued)

THENCE along the South line of said Section 2, South 89° 55' 51" West (South 89° 55' 23" West, record), 171.15 feet to a point on the Northwesterly line of Mountain Vista Boulevard, as shown on plat of Mountain Vista Boulevard, Hunt Highway, Parcel G and Parcel H, according to Cabinet D, Slide 175, records of Pinal County, Arizona and the **POINT OF BEGINNING**;

THENCE continuing along said South line, South 89° 55' 51" West, 2479.50 feet to the South quarter corner of said Section 2;

THENCE North 00° 01' 18" West, 529.54 feet to the beginning of a tangent curve concave Southeasterly and having a radius of 1500.00 feet;

THENCE Northeasterly along the arc of said curve, through a central angle of 40° 47' 42", a distance of 1068.01 to a point of tangency;

THENCE North 40° 46' 24" East, 283.42 feet to a point on the centerline of Hunt Highway, according to Declaration of Road No. 31, recorded in Book 7 of Minutes, page 195 of the Pinal County, Arizona Board of Supervisors;

THENCE South 49° 12' 37" East, along said centerline, 2586.17 feet to a point of intersection with the Northwesterly line of said Mountain Vista Boulevard;

THENCE South 40° 47' 23" West, along said Northwesterly line, 42.08 feet to the **POINT OF BEGINNING**

Except A portion of land being situated within the South Half of Section 2, Township 3 South, Range 7 East of the Gila and Salt River Meridian, Pinal County, Arizona, being more particularly described as follows:

BEGINNING at the South quarter corner (1' iron pipe) of said Section 2, from which the Southwest corner (Pinal County brass cap) of Section 2 bears South 89°45'04" West, 2651.54 feet

Thence along the south line of the Southwest Quarter of said Section 2. South 89° 45' 04" West, 2651.54 feet Thence leaving said south One, North 00°02'59" West, 705.02 feet along the monumented centerline of Thompson road, to the beginning of a curve concave to the southeast having a radius of 1200.00 feet;

Thence northeasterly along said curve and said centerline, through a central angle of 46° 10' 38", an arc length of 967.13 feet to a point of tangency

Thence North 46° 07' 39" East, 439.89 feet

Thence leaving said centerline South 43° 52' 21" East, 55.00 feet to a non-tangent curve, concave to the south, having a radius of 30.00 feet, the center of which bears South 43° 52' 21" East;

Thence easterly along said curve, through a central angle of 89° 36' 07", an arc length of 46.92 feet to a reverse curve concave to the northeast, having a radius of 165.00 feet;

Thence southeasterly along said curve, through a central angle of 45° 49' 21", an arc length of 131.96 feet to a point of tangency;

Thence North 89° 54' 25" East, 246.82 feet to the beginning of a curve concave to the south, having a radius of 260.00 feet;

Thence easterly along said curve, through a central angle of 40° 42' 38", an arc length of 184.74 feet to a point of tangency;

Thence South 49° 22' 57" East, 1306.93 feet;

EXHIBIT A
(Continued)

Thence North 89° 45' 30" East, 393.90 feet to a non-tangent curve, concave to the east, having a radius of 1500.00 feet the center of which bears South 77° 21' 23" East;

Thence south along said curve, through a central angle of 12° 50' 12", an arc length of 336.06 feet to a point of tangency;

Thence South 00° 11' 35" East, 529.54 feet to the POINT OF BEGINNING.

[APN: 509-02-9260](#), 509-02-9290

CONDITION OF TITLE REPORT

SCHEDULE B

Fidelity National Title Insurance Company reports that Title Instruments, on the date hereof, disclose:

1. Ownership of the Interest is in the name of:

Borgata Ventures, LLC, an Arizona Limited Liability Company as to Parcel 1 and SKYHI Holdings, LLC, an Arizona limited liability company as to Parcel 2

2. The following defects, liens and encumbrances (which are not necessarily shown in their order of priority) against the Interest:

1. Property taxes, including any personal property taxes and any assessments collected with taxes, for the First Installment of 2020 Taxes, plus interest and penalties.

2. Any rights, liens, claims or equities, if any, in favor of Central Arizona Water Conservation District.

3. Any rights, liens, claims or equities, if any, in favor of New Magma Irrigation and Drainage District.

4. Right of Way for Hunt Highway recorded in Boo 7 of Minutes, page 195

5. Easements, covenants, conditions and restrictions as set forth on the plat recorded in [Book 10 of Surveys, Page 215](#).

6. Matters contained in that certain document

Entitled: Resolution

[Recording No: 99-32325](#)

Reference is hereby made to said document for full particulars.

7. Matters contained in that certain document

Entitled: Ordinance No 122000-BS

[Recording No: 2001-00756](#)

Reference is hereby made to said document for full particulars.

8. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition, or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

[Recording No: 2004-13481](#)

(PARCEL 1)

9. Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition, or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

[Recording No: 2004-13482](#)

(PARCEL 2)

SCHEDULE B
(Continued)

10. Matters contained in that certain document

Entitled: Ordinance No 121207-AQ1

[Recording No: 2008-01862](#)

Reference is hereby made to said document for full particulars.

11. Matters contained in that certain document

Entitled: Utility Easement Agreement

[Recording No: 2012-72316](#)

(PARCEL 1)

12. Matters contained in that certain document

Entitled: Resolution No 072314-RD14-003

[Recording No: 2014-043893](#)

Reference is hereby made to said document for full particulars.

13. Matters contained in that certain document

Entitled: Permanent Drainage Easement and Agreement

[Recording No: 2014-047413](#)

(PARCEL 1)

Reference is hereby made to said document for full particulars.

14. Matters contained in that certain document

Entitled: License to use right of way

[Recording No: 2017-065729](#)

(PARCEL 2)

Reference is hereby made to said document for full particulars.

15. Matters contained in that certain document

Entitled: Memorandum of Joint Development Agreement

[Recording No: 2018-093772](#)

(PARCEL 1, 2)

Reference is hereby made to said document for full particulars.

16. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document:

Purpose: access and utility

[Recording No: 2019-027453](#)

(PARCEL 1)

17. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document:

Purpose: access and utility

SCHEDULE B
(Continued)

[Recording No: 2019-027455](#)
(PARCEL 1)

18. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document:

Purpose: access and utility
[Recording No: 2019-027456](#)
(PARCEL 2)

19. Matters contained in that certain document

Entitled: Contract No 19-LM-32-4243
[Recording No: 2019-029906](#)
(PARCEL 2)

Reference is hereby made to said document for full particulars.

Tax Note:

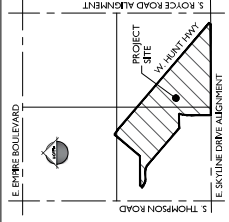
[Tax Parcel No.: 509-02-926](#)
[Tax Parcel No.: 509-02-929](#)

3. The following matters are disclosed by name only and the Company, without additional information, is unable to determine whether any or all of these matters are defects, liens or encumbrances against the Interest:

Note: This Condition of Title Report does not address General Index matters (such as proceedings, liens, or decrees), which do not specifically describe said Land.

21-0512 - Borgata at San Tan

VICINITY MAP



PROJECT TEAM

CLIENT/OWNER:
 BORGATA DEVELOPMENT LLC
 14000 W. WINDYWAY BLVD
 SUITE 100
 DENVER, CO 80231
 TEL: (303) 755-1347
 FAX: (303) 755-1348
 CONTACT: JIM HANSON
 jim.hanson@borgatadev.com

PLANNER, ENGINEER, AND LANDSCAPE ARCHITECT:
 EPS GROUP INC.
 1100 N ALPINE SCHOOL ROAD
 SUITE 100
 MESA, AZ 85201
 TEL: (480) 949-7900
 CONTACT: JOHN HANSON
 john.hanson@epsgrp.com

APPLICANT:
 PLAN CONSULTING
 1100 N ALPINE SCHOOL ROAD
 SUITE 100
 MESA, AZ 85201
 TEL: (480) 272-9880
 CONTACT: JIM HANSON
 jim.hanson@planconsulting.com

LAND PLANNER:
 LANDSCAPE ARCHITECT
 (MULTI-FAMILY) A.B.B.L.
 450 N. 17TH STREET
 PHOENIX, AZ 85018
 CONTACT: NICHOLAS MAXWELL
 nmaxwell@abbl.com

ARCHITECT:
 ARCHITECTURAL A.B.B.L.
 5111 N. CANTERBURY ROAD
 SUITE 100
 MESA, AZ 85205
 TEL: (480) 949-7900
 CONTACT: DEAN HURKACHY / AIA LEED AP
 dean.hurkachy@abbl.com

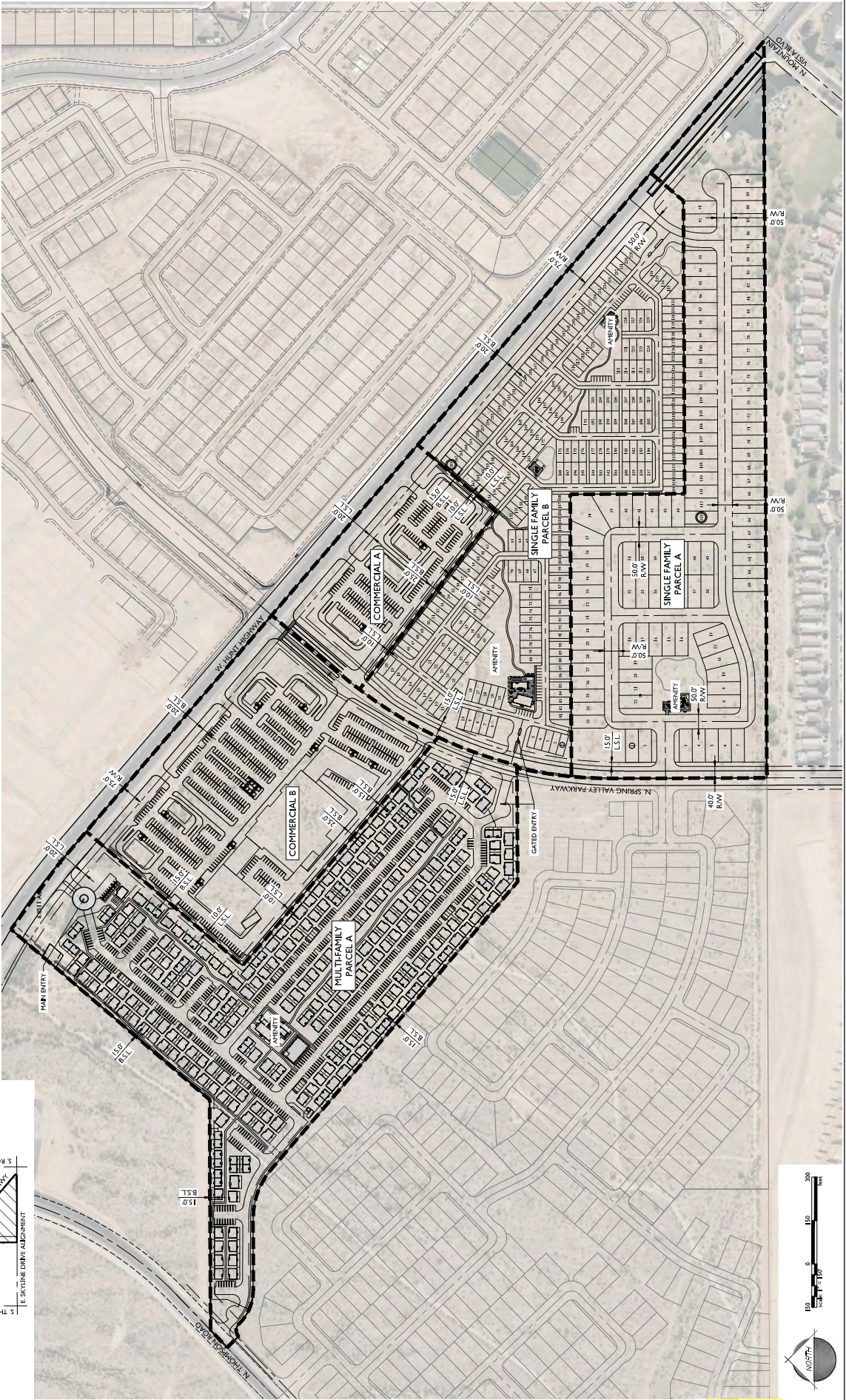
PROJECT DATA

APN: 59020265, 59042679
EXISTING COMPREHENSIVE PLAN: COMMUNITY CENTER (SAN TAN VALLEY SPECIAL AREA PLAN) - 897 AC
PROPOSED COMPREHENSIVE PLAN: URBAN TRANSITIONAL (SAN TAN VALLEY SPECIAL AREA PLAN) - 244 AC
PROPOSED ZONING: CC, UR, MID, PZ, PZO
GROSS AREA: 997 AC

UNITS	ACRES
100 DU/AC	1.246 AC
110 DU/AC	1.246 AC
120 DU/AC	1.246 AC
130 DU/AC	1.246 AC
140 DU/AC	1.246 AC
150 DU/AC	1.246 AC
160 DU/AC	1.246 AC
170 DU/AC	1.246 AC
180 DU/AC	1.246 AC
190 DU/AC	1.246 AC
200 DU/AC	1.246 AC
210 DU/AC	1.246 AC
220 DU/AC	1.246 AC
230 DU/AC	1.246 AC
240 DU/AC	1.246 AC
250 DU/AC	1.246 AC
260 DU/AC	1.246 AC
270 DU/AC	1.246 AC
280 DU/AC	1.246 AC
290 DU/AC	1.246 AC
300 DU/AC	1.246 AC
310 DU/AC	1.246 AC
320 DU/AC	1.246 AC
330 DU/AC	1.246 AC
340 DU/AC	1.246 AC
350 DU/AC	1.246 AC
360 DU/AC	1.246 AC
370 DU/AC	1.246 AC
380 DU/AC	1.246 AC
390 DU/AC	1.246 AC
400 DU/AC	1.246 AC
410 DU/AC	1.246 AC
420 DU/AC	1.246 AC
430 DU/AC	1.246 AC
440 DU/AC	1.246 AC
450 DU/AC	1.246 AC
460 DU/AC	1.246 AC
470 DU/AC	1.246 AC
480 DU/AC	1.246 AC
490 DU/AC	1.246 AC
500 DU/AC	1.246 AC
510 DU/AC	1.246 AC
520 DU/AC	1.246 AC
530 DU/AC	1.246 AC
540 DU/AC	1.246 AC
550 DU/AC	1.246 AC
560 DU/AC	1.246 AC
570 DU/AC	1.246 AC
580 DU/AC	1.246 AC
590 DU/AC	1.246 AC
600 DU/AC	1.246 AC
610 DU/AC	1.246 AC
620 DU/AC	1.246 AC
630 DU/AC	1.246 AC
640 DU/AC	1.246 AC
650 DU/AC	1.246 AC
660 DU/AC	1.246 AC
670 DU/AC	1.246 AC
680 DU/AC	1.246 AC
690 DU/AC	1.246 AC
700 DU/AC	1.246 AC
710 DU/AC	1.246 AC
720 DU/AC	1.246 AC
730 DU/AC	1.246 AC
740 DU/AC	1.246 AC
750 DU/AC	1.246 AC
760 DU/AC	1.246 AC
770 DU/AC	1.246 AC
780 DU/AC	1.246 AC
790 DU/AC	1.246 AC
800 DU/AC	1.246 AC
810 DU/AC	1.246 AC
820 DU/AC	1.246 AC
830 DU/AC	1.246 AC
840 DU/AC	1.246 AC
850 DU/AC	1.246 AC
860 DU/AC	1.246 AC
870 DU/AC	1.246 AC
880 DU/AC	1.246 AC
890 DU/AC	1.246 AC
900 DU/AC	1.246 AC
910 DU/AC	1.246 AC
920 DU/AC	1.246 AC
930 DU/AC	1.246 AC
940 DU/AC	1.246 AC
950 DU/AC	1.246 AC
960 DU/AC	1.246 AC
970 DU/AC	1.246 AC
980 DU/AC	1.246 AC
990 DU/AC	1.246 AC
1000 DU/AC	1.246 AC

LEGEND

B.S.L. BUILDING SETBACK LINE
 L.S.L. LANDSCAPE SETBACK LINE
 R.W. RIGHT OF WAY



Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Borgata at San Tan

Project Description:

Borgata at San Tan: Comprehensive Plan amendment, Planned Area Development Amendment, Planned Area Development & Rezone.

Project Type:

Development Outside Municipalities (Rural Development), Residential single dwelling and associated infrastructure, New construction

Contact Person:

Mario Mangiamele

Organization:

lplan Consulting

On Behalf Of:

PINAL

Project ID:

HGIS-14483

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. HabiMap Arizona data, specifically Species of Greatest Conservation Need (SGCN) under our State Wildlife Action Plan (SWAP) and Species of Economic and Recreational Importance (SERI), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

Locations Accuracy Disclaimer:

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



Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
Project Evaluation Program, Habitat Branch
Arizona Game and Fish Department
5000 West Carefree Highway
Phoenix, Arizona 85086-5000
Phone Number: (623) 236-7600
Fax Number: (623) 236-7366
Or
PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies

Borgata at San Tan

USA Topo Basemap With Locator Map



-  Project Boundary
-  Buffered Project Boundary

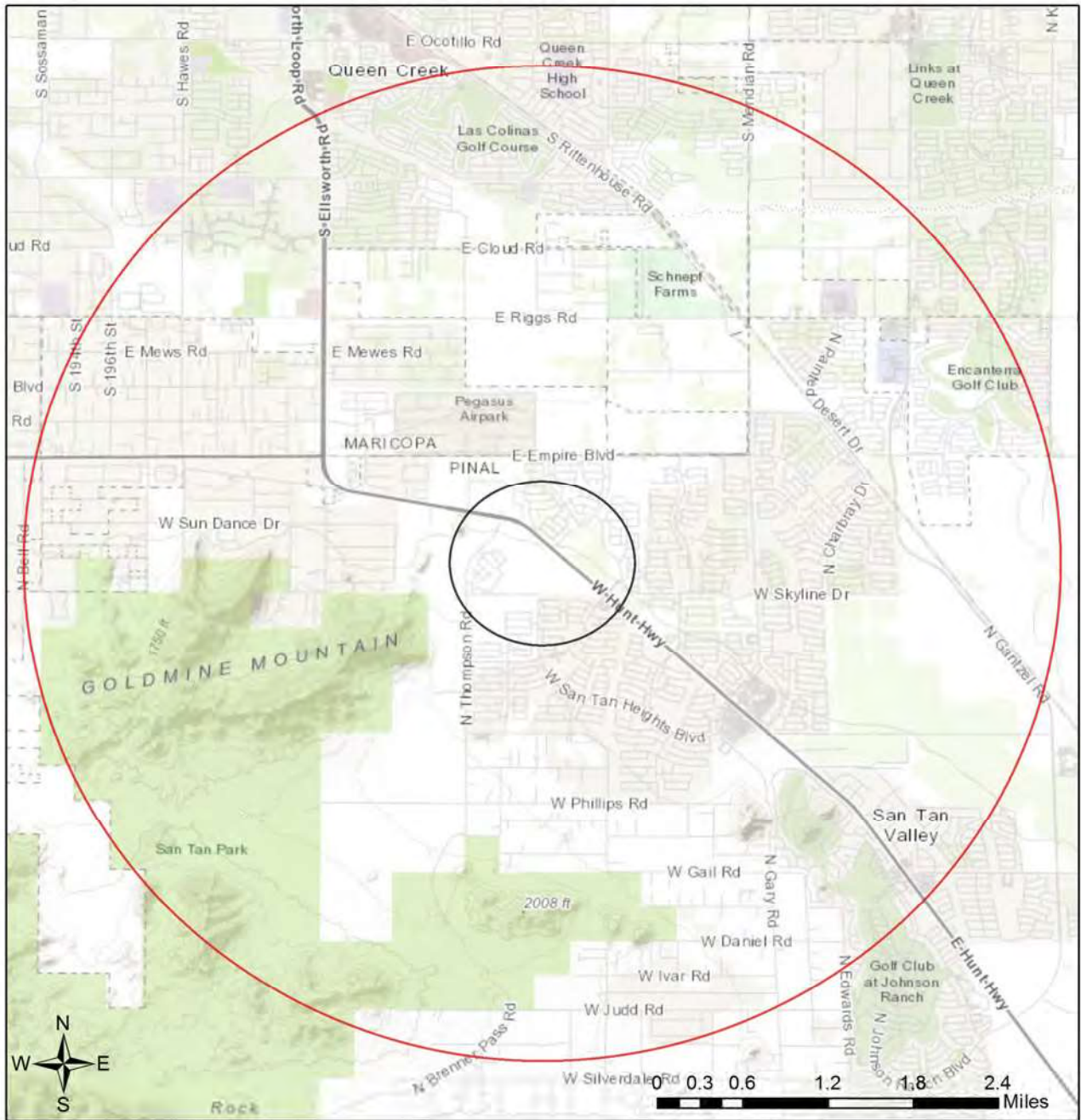
Project Size (acres): 775.64
Lat/Long (DD): 33.1940 / -111.6077
County(s): Pinal
AGFD Region(s): Mesa
Township/Range(s): T3S, R7E
USGS Quad(s): SACATON NE

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap



Borgata at San Tan

Web Map As Submitted By User

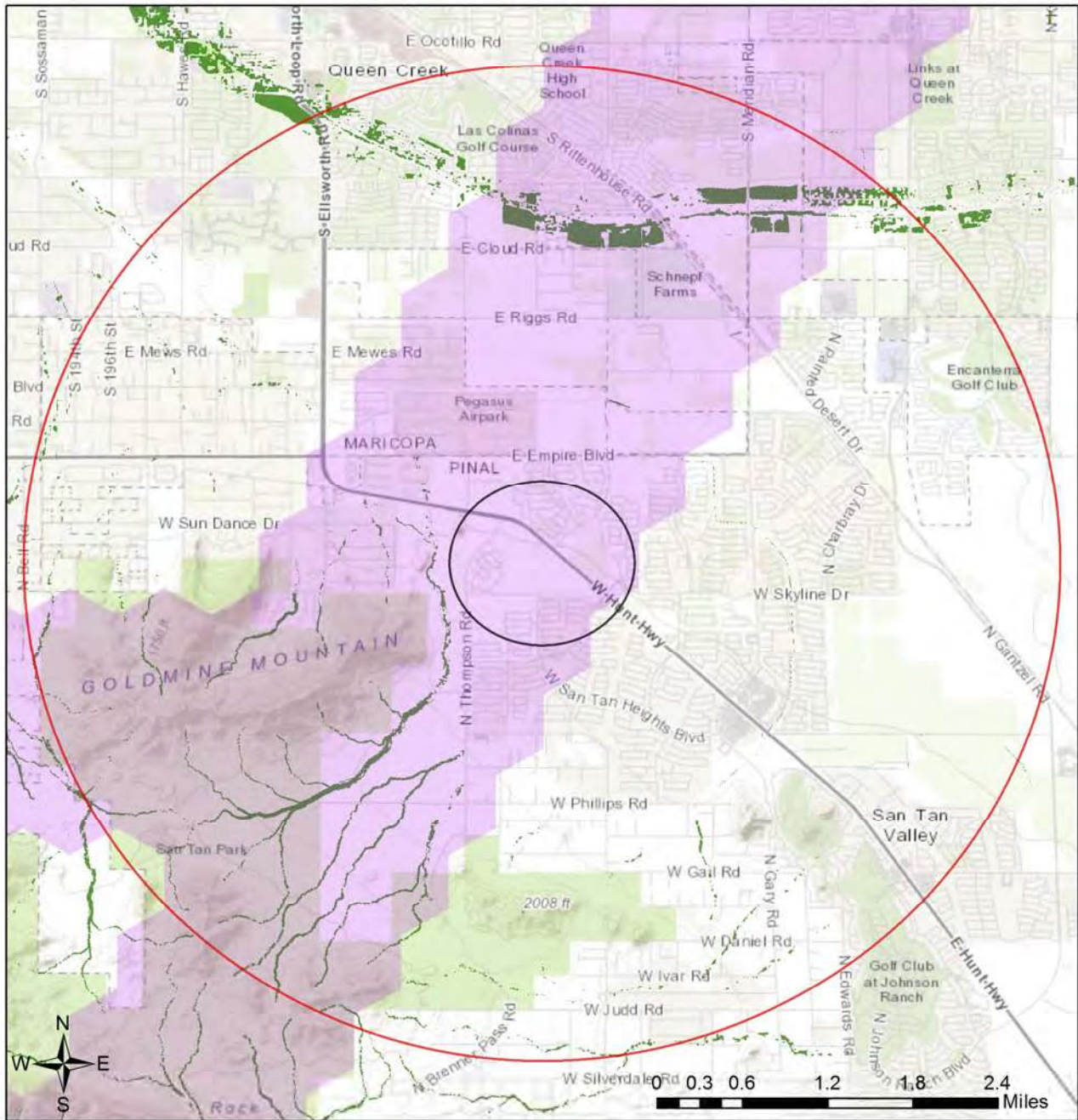


- Project Boundary
- Buffered Project Boundary

Project Size (acres): 775.64
 Lat/Long (DD): 33.1940 / -111.6077
 County(s): Pinal
 AGFD Region(s): Mesa
 Township/Range(s): T3S, R7E
 USGS Quad(s): SACATON NE

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Borgata at San Tan Important Areas



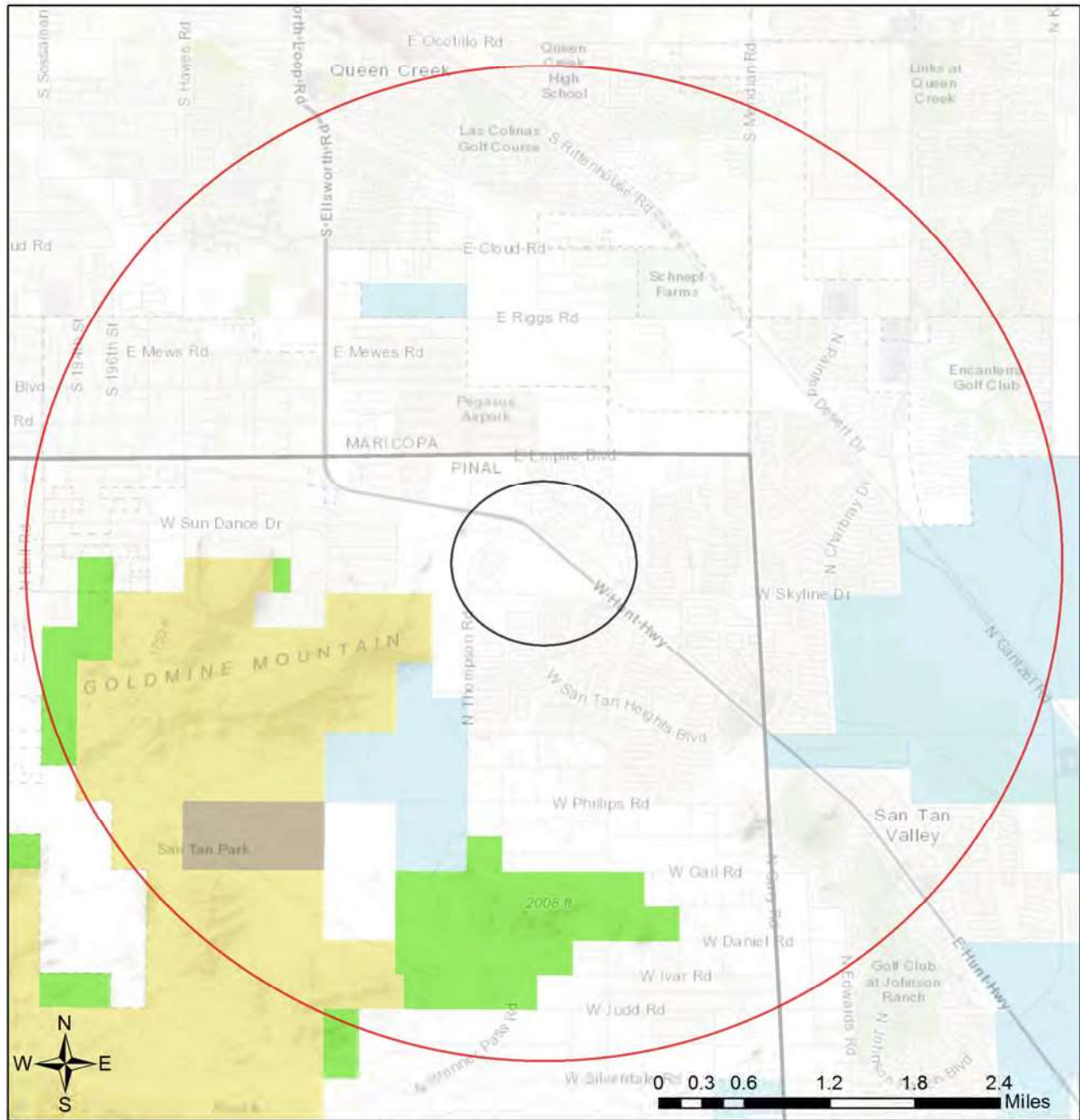
- Project Boundary
- Buffered Project Boundary
- Wildlife Connectivity
- Important Connectivity Zones
- Pinal County Riparian
- Critical Habitat
- Important Bird Areas

Project Size (acres): 775.64
 Lat/Long (DD): 33.1940 / -111.6077
 County(s): Pinal
 AGFD Region(s): Mesa
 Township/Range(s): T3S, R7E
 USGS Quad(s): SACATON NE

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Borgata at San Tan

Township/Ranges and Land Ownership



- | | |
|---------------------------|------------------------|
| Project Boundary | Military |
| Buffered Project Boundary | Mixed/Other |
| Township/Ranges | National Park/Mon. |
| Land Ownership | |
| AZ Game & Fish Dept. | State & Regional Parks |
| BLM | State Trust |
| BOR | US Forest Service |
| Indian Res. | Wildlife Area/Refuge |

Project Size (acres): 775.64
 Lat/Long (DD): 33.1940 / -111.6077
 County(s): Pinal
 AGFD Region(s): Mesa
 Township/Range(s): T3S, R7E
 USGS Quad(s): SACATON NE

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Chionactis annulata	Resplendent Shovel-nosed Snake					1C
Gopherus morafkai	Sonoran Desert Tortoise	C	S	S		1A
Lepus alleni	Antelope Jackrabbit					1B

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

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Important Connectivity Zone	Wildlife Connectivity					

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

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Aix sponsa	Wood Duck					1B
Ammospermophilus harrisi	Harris' Antelope Squirrel					1B
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Buteo regalis	Ferruginous Hawk	SC		S		1B
Calypte costae	Costa's Hummingbird					1C
Chilomeniscus stramineus	Variable Sandsnake					1B
Chionactis annulata	Resplendent Shovel-nosed Snake	SC				1C
Colaptes chrysoides	Gilded Flicker			S		1B
Corynorhinus townsendii pallascens	Pale Townsend's Big-eared Bat	SC	S	S		1B
Crotalus tigris	Tiger Rattlesnake					1B
Cynanthus latirostris	Broad-billed Hummingbird		S			1B
Empidonax wrightii	Gray Flycatcher					1C
Euderma maculatum	Spotted Bat	SC	S	S		1B
Eumops perotis californicus	Greater Western Bonneted Bat	SC		S		1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1A
Gopherus morafkai	Sonoran Desert Tortoise	C	S	S		1A
Haliaeetus leucocephalus	Bald Eagle	SC, BGA	S	S		1A
Heloderma suspectum	Gila Monster					1A
Incilius alvarius	Sonoran Desert Toad					1B
Lasiurus blossevillii	Western Red Bat		S			1B
Lasiurus xanthinus	Western Yellow Bat		S			1B

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Leptonycteris yerbabuenae	Lesser Long-nosed Bat	SC				1A
Lepus alleni	Antelope Jackrabbit					1B
Macrotus californicus	California Leaf-nosed Bat	SC		S		1B
Melanerpes uropygialis	Gila Woodpecker					1B
Melospiza lincolni	Lincoln's Sparrow					1B
Melospiza aberti	Abert's Towhee		S			1B
Micrathene whitneyi	Elf Owl					1C
Micruroides euryxanthus	Sonoran Coralsnake					1B
Myiarchus tyrannulus	Brown-crested Flycatcher					1C
Myotis occultus	Arizona Myotis	SC		S		1B
Myotis velifer	Cave Myotis	SC		S		1B
Myotis yumanensis	Yuma Myotis	SC				1B
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					1B
Oreoscoptes montanus	Sage Thrasher					1C
Oreothlypis luciae	Lucy's Warbler					1C
Panthera onca	Jaguar	LE				1A
Passerculus sandwichensis	Savannah Sparrow					1B
Phrynosoma solare	Regal Horned Lizard					1B
Phyllorhynchus browni	Saddled Leaf-nosed Snake					1B
Progne subis hesperia	Desert Purple Martin			S		1B
Setophaga petechia	Yellow Warbler					1B
Spizella breweri	Brewer's Sparrow					1C
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B
Toxostoma lecontei	LeConte's Thrasher			S		1B
Vireo bellii arizonae	Arizona Bell's Vireo					1B
Vulpes macrotis	Kit Fox	No Status				1B

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Development Outside Municipalities (Rural Development), Residential single dwelling and associated infrastructure, New construction

Project Type Recommendations:

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

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

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

Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at https://www.invasivespeciesinfo.gov/unitedstates/az_shtml and the Arizona Native Plant Society <https://aznps.com/invas> for recommendations on how to control. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives - a national cloud-based application for tracking and managing invasive species at <https://imap.natureserve.org/imap/services/page/map.html>.

- To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of interest, and select "See What's Here" for a list of reported species. To export the list, you must have an account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv file.

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

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

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

Based on the project type entered, coordination with Arizona Department of Water Resources may be required (<https://new.azwater.gov/>).

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

Based on the project type entered, coordination with County Flood Control district(s) may be required.

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

Project Location and/or Species Recommendations:

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

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

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

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

HDMS records indicate that **Sonoran Desert Tortoise** have been documented within the vicinity of your project area. Please review the Tortoise Handling Guidelines found at: <https://www.azgfd.com/wildlife/nongamemanagement/tortoise/>

Analysis indicates that your project is located in the vicinity of an identified **wildlife habitat connectivity feature**. The **Statewide Wildlife Connectivity Assessment's Important Connectivity Zones** (ICZs) represent general areas throughout the landscape which contribute the most to permeability of the whole landscape. ICZs may be used to help identify, in part, areas where more discrete corridor modeling ought to occur. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://s3.amazonaws.com/azgfd-portal-wordpress/azgfd/wp/wp-content/uploads/0001/01/23120719/ALIWCA_Final_Report_Perkl_2013_lowres.pdf. Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

HDMS records indicate that **Western Burrowing Owls** have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at: <https://www.azgfd.com/wildlife/speciesofgreatestconservneed/burrowingowlmanagement/>.

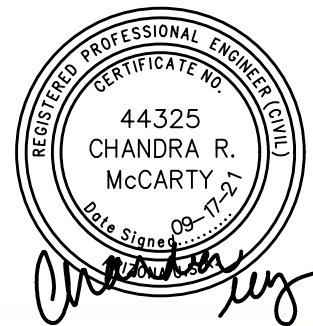


Preliminary Drainage Report

For

Borgata/SkyHI Pinal County, Arizona

Owner/Developer
Borgata Ventures, LLC
SkyHI Holdings, LLC
12340 Saratoga-Sunnyvale Rd
Saratoga, CA 95070
Contact: Peggy Galeb



Project No. 21-0512

Date: September 2021

1125 W. Pinnacle Peak Road, Suite 136
Phoenix, AZ 85027
o: 480.503.2250
f: 480.503.2258

Table of Contents

1.0	Introduction	2
2.0	Flood Insurance Rate Zone	2
3.0	Offsite Drainage Characteristics & Hydrology.....	2
4.0	Onsite Drainage	3
4.1	Rainfall Data.....	3
4.2	Onsite Retention.....	3
4.3	Drainage Easements.....	4
5.0	Onsite Hydraulics and Hydrology	4
6.0	Phasing.....	5
7.0	Conclusion.....	5
8.0	References	5

Appendices

Appendix A: Figures

Appendix B: Preliminary Retention Calculations

Appendix C: Existing HEC-I results from Fulton Homes Promenade

Appendix D: Excerpts from the Hunt Highway Widening Project (Phase 2) Drainage Study

List of Figures

Figure 1: Vicinity Map.....	Appendix A
Figure 2: FIRM Map.....	Appendix A
Figure 3: Drainage Map - Retention.....	Appendix A
Figure 4: HEC-I Schematic.....	Appendix A



1.0 Introduction

Borgata/SkyHI is an approximate 99-acre development of mixed-use development. There are 115 lots in the Single-Family parcel, 156 units in the cluster home parcel, 132 village units, and 19 gross acres of commercial development. The project is located along the southwest side of Hunt Highway between Thompson Road and Mountain Vista Boulevard. Borgata/SkyHI is located in a portion of section 2, Township 3 South, Range 7 East of the Gila and Salt River Meridian in Pinal County, Arizona. See Appendix A for Vicinity Map.

The project is currently natural desert and abandoned agricultural land sloping approximately 1.0% northerly.

This preliminary drainage report will evaluate drainage characteristics for the project. Specifically, this report will establish the offsite drainage affecting the property, and how that storm water will be managed. Design parameters from Pinal County will be applied to this proposed project to ensure adherence to regulations. A more detailed and final analysis of drainage will be provided during the final engineering stage of this project.

2.0 Flood Insurance Rate Zone

Borgata/SkyHI lies within Zone “X” as depicted on the Flood Insurance Rate Map (Map No. 04021C0475E dated December 4, 2007). See Appendix A for FIRM Map.

Flood Zone X is defined as:

Areas of minimal flood hazard.

3.0 Offsite Drainage Characteristics & Hydrology

This project is located northeast of the San Tan Mountains, and receives runoff from watersheds associated with these mountains. These watersheds are analyzed within the Hunt Highway Widening Project (Phase 2) Drainage Study, prepared by TYLin. A copy of the HEC-I output and routing schematic from the Fulton Homes Promenade Drainage Report is included in the Appendices. The report indicates that flow is routed adjacent to Thompson Road and the flow within the Multi-Family Borgata/SkyHI improvements end up in an existing retention basin and are routed under Hunt Highway. The proposed connection to Thompson Road will utilize a combination of 36-inch storm drain culverts in series to convey the 270 cfs that was channelized upstream with the San Tan Heights improvements to the south. The improvements within Borgata are providing full 100-year, 2-hour retention and will reduce the flows requiring to be carried from the existing box culvert.

4.0 Onsite Drainage

The drainage scheme of this project is to allow all onsite storm water to drain into the roadways in order to be carried to low points where runoff will be conveyed into surface retention basin by scuppers or catch basins.

4.1 Rainfall Data

Rainfall Data for this project has been taken from NOAA ATLAS 14 ("Precipitation-Frequency Atlas of the United States" NOAA Atlas 14, Volume I, Version 5). The Data taken represents the approximate project location as estimated using Google Earth. Results from the Average recurrence interval have been used to compute the site-specific runoff values and the site specific I-D-F curve (Intensity-Duration-Frequency Curve). See Appendix B.

4.2 Onsite Retention

Preliminary required retention volume calculations have been performed using Equation 2-4 from the Pinal County Drainage Manual Volume 2, and provided basin volumes were calculated using the Conic Approximation Method.

Conic Approximation Equation:

$$V = \frac{d}{3} (A_{top} + A_{bot} + \sqrt{A_{top} A_{bot}})$$

Retention basins will be designed to retain 100% of the 100-year 2-hour storm event. Onsite storm water will not be allowed to comingle with offsite storm water. All basins will be designed to pond up to 3 feet, and have 1 foot of freeboard between the design high water elevation and the inlet elevation. Final retention basin volumes will be provided in the final drainage report. See Appendix A and Appendix B for preliminary retention calculations.

Percolation tests will be conducted at the locations of the proposed basins to determine the surface percolation rates for each basin. The remaining volume required to be dewatered will be calculated for each basin.

Drywells will be used to facilitate percolation of the runoff. Pinal County standards require all retention basins to drain their volume from the 100-year, 2-hour storm event within a 36-hour period. The amount of drywells required will be determined with the final drainage report.

4.3 Drainage Easements

All retention basins collecting runoff from public right-of-way will be contained in tracts.

5.0 Onsite Hydraulics and Hydrology

A final drainage report will be developed along with final improvement plans for this site. The final grading plan will dictate the hydraulic analysis of the street capacities, curb transitions, inlet sizing, and storm drains.

The street capacities will be calculated using Manning's equation:

$$Q = \frac{1.486 AR^{2/3} S^{0.5}}{N}$$

Where:

'S' = Street longitudinal slope (ft/ft)

'A' = Flow Area (sq. ft)

'R' = Hydraulic Radius (ft)

'n' = Manning's roughness coefficient = (0.015)

All inlets within this project will be catch basins or scuppers and will discharge into surface retention basins.

Finished floor elevations will be provided on the final grading plan to ensure that finished floors of all houses are able to outfall per Pinal County requirements.

Arterial and Collector streets will be designed to convey the 10-year peak flow such that the flowing drainage does not encroach more than one travel lane from either side, per Pinal County standards (PCDDM VI Section 3.3.2.1). Per section 3.3.1 of Volume 2 of the Pinal County Drainage Manual, the modified Manning's equation (equation 3.2) will be used to calculate gutter capacity based on street spread for arterial streets for the 10-year event, and Manning's Equation (equation 3.1) shall be used for total street capacity for the 100-year event and all storm events for local streets. The 100-year peak flow will be conveyed within the right of way at a depth no greater than 6" above the centerline per Pinal County standards.

Local streets will be designed to convey the 10-year peak flow below the top of curb and the 100-year peak flow within the right of way at a depth no greater than 6" above the centerline per Pinal County standards.

Where 4" roll curb is not able to convey its runoff as described above, 6" vertical curb or 6" roll curb will be installed and where 6" roll curb is not able to convey its

runoff as described above, the drainage will be captured by storm drains or other drainage ways upstream of the calculated location where the 6" roll curb capacity is exceeded.

According to the Pinal County Subdivision and Infrastructure Design Manual Section 6.12.2 the minimum longitudinal street grade for all streets is 0.25%.

6.0 Phasing

The proposed phasing approach for the site is to develop each type of land use on its own one at a time. As the project progresses the final phasing order is to be implemented during final design reports and will be implemented that time.

7.0 Conclusion

This report concluded that:

- This site will be designed in accordance to Pinal County Drainage Ordinance, Manual, & Standards.
- Offsite drainage does not directly impact the project site
- Preliminary retention requirements for onsite storm water and perimeter half streets have been met by onsite surface retention basins to retain the 100-year, 2-hour storm event.
- Inlets and Storm Drain Pipes will be designed to convey the 10-year storm event.
- The retention basins will drain within the 36-hour requirement by means of surface percolation and drywells.
- This site will create no adverse impacts on downstream or upstream property.

8.0 References

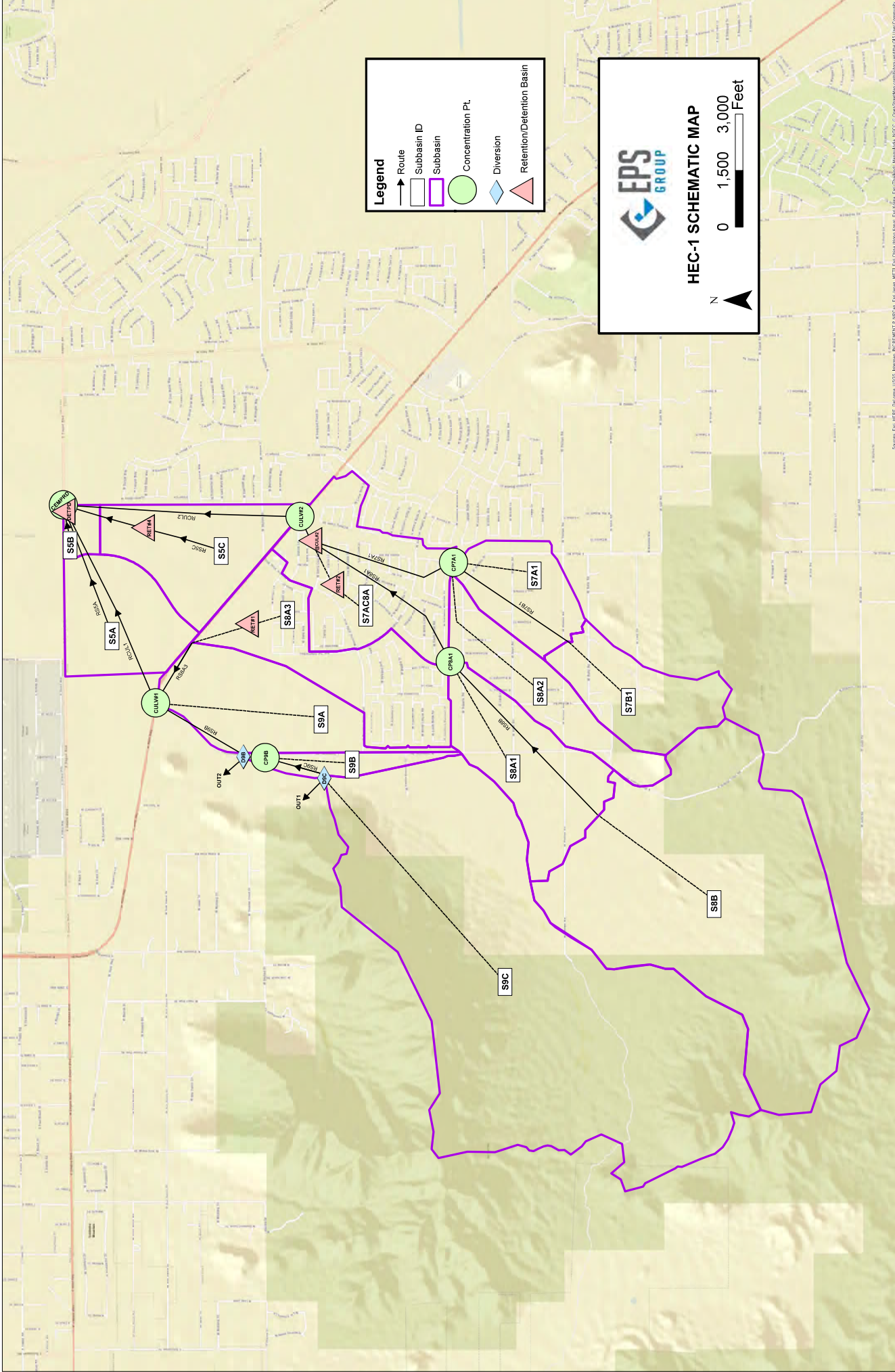
Pinal County, AZ:

Pinal County Drainage Manual, Volume 2, hydraulics.

Tempe, AZ:

Approved Hunt Highway Widening Project (Phase 2) Drainage Study by Ty Lin International, June 25, 2014.

Appendix A: Figures



Legend

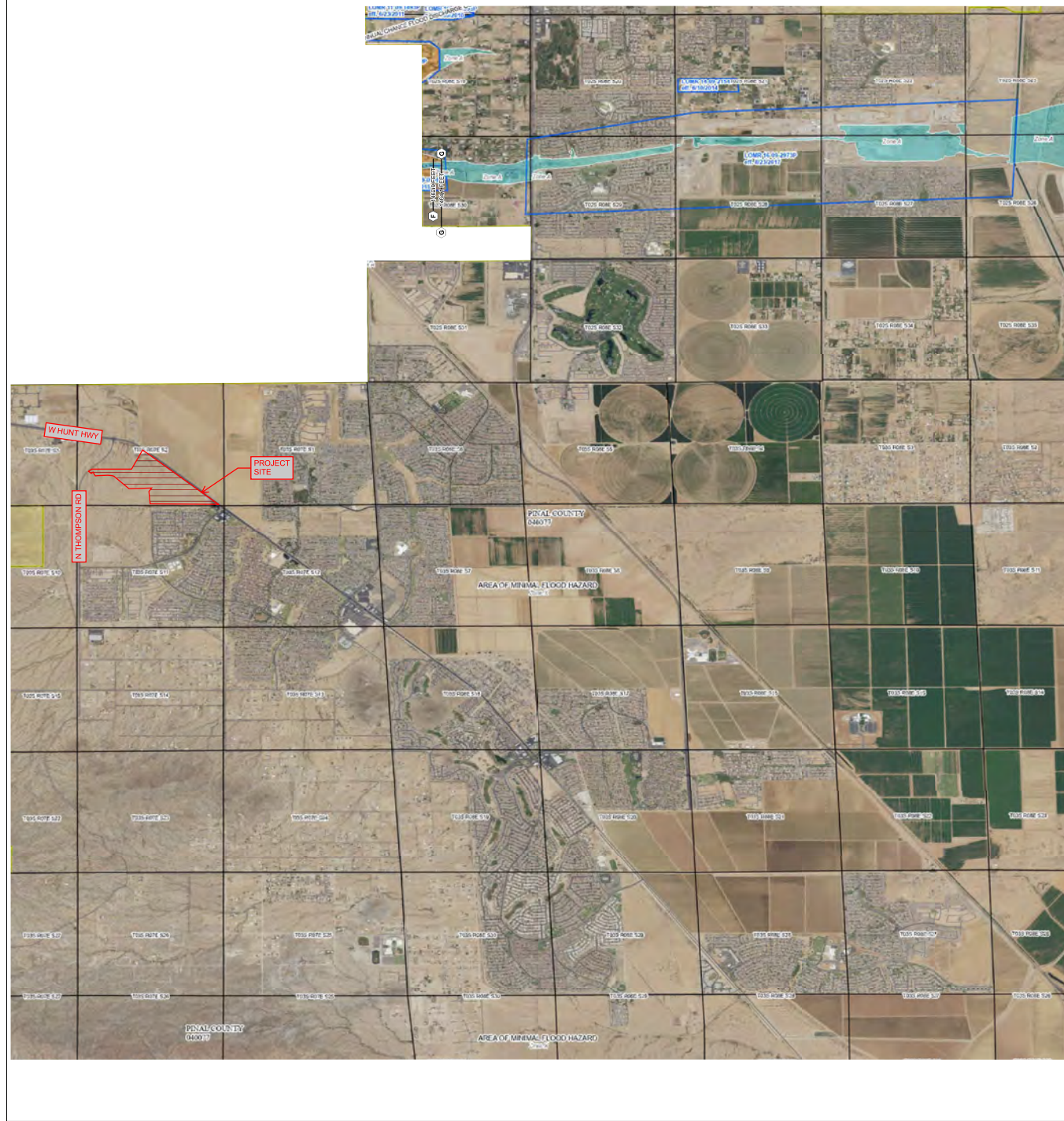
- Route
- Subbasin ID
- ▭ Subbasin
- Concentration Pt.
- ◇ Diversion
- △ Retention/Detention Basin

EPS GROUP

HEC-1 SCHEMATIC MAP

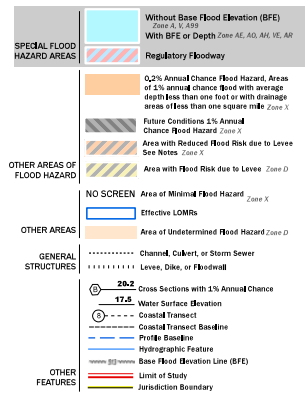
N

0 1,500 3,000 Feet



111°29'58.33"W 33°17'3.69"N

FLOOD HAZARD INFORMATION
SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FIRM PANEL LAYOUT



NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, and/or historic versions, the current map data for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-1345 or visit the FEMA Flood Map Service Center website at <https://msc.fema.gov>. Available products may include previously issued letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Communities showing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Panel. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and county/city map data, refer to the Flood Insurance Study Report for jurisdiction.

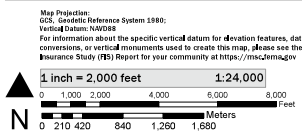
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-433-8242.

Base map information shown on this FIRM was provided in digital format by the United States Geological Survey (USGS). The base map shown is the USGS National Map of Orthorectified Imagery, last refreshed October, 2005.

This map was exported from FEMA's National Flood Hazard Layer (NFHL) on 02/20/2014 10:19 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet at <https://www.fema.gov/media-library/assets/documents/15418>.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards. This map shall be used if this one or more of the following map elements do not appear: base map imagery, flood zone labels. Legend, scale bar, map creation date, community identifier, FIRM panel number, and FIRM effective date.

SCALE



NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

PANEL 475 of 2575

Panel Contains:

COMMUNITY	NUMBER	PANEL
TOWN OF QUEEN CREEK	040132	0475
SANTAN MOUNTAINS REGIONAL PARK	040077	0475
BITTENHOUSE AIR FORCE AUXILIARY FIELD	041ED	0475
PINAL COUNTY	040077	0475
MARKICORA COUNTY	040037	0475

MAP NUMBER
04021C0475E
EFFECTIVE DATE
December 04, 2007



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps_&_aerials](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.194 (0.164-0.235)	0.253 (0.216-0.308)	0.344 (0.289-0.415)	0.412 (0.345-0.495)	0.504 (0.416-0.604)	0.576 (0.469-0.688)	0.649 (0.519-0.774)	0.723 (0.568-0.861)	0.822 (0.629-0.981)	0.898 (0.673-1.08)
10-min	0.295 (0.250-0.358)	0.386 (0.329-0.469)	0.523 (0.440-0.631)	0.626 (0.524-0.754)	0.768 (0.632-0.919)	0.877 (0.713-1.05)	0.988 (0.789-1.18)	1.10 (0.864-1.31)	1.25 (0.958-1.49)	1.37 (1.02-1.64)
15-min	0.366 (0.309-0.444)	0.478 (0.407-0.581)	0.648 (0.546-0.782)	0.776 (0.650-0.934)	0.951 (0.784-1.14)	1.09 (0.884-1.30)	1.22 (0.978-1.46)	1.36 (1.07-1.62)	1.55 (1.19-1.85)	1.69 (1.27-2.03)
30-min	0.493 (0.416-0.598)	0.644 (0.548-0.782)	0.872 (0.735-1.05)	1.05 (0.875-1.26)	1.28 (1.06-1.54)	1.46 (1.19-1.75)	1.65 (1.32-1.97)	1.84 (1.44-2.19)	2.09 (1.60-2.49)	2.28 (1.71-2.73)
60-min	0.610 (0.515-0.740)	0.797 (0.678-0.968)	1.08 (0.909-1.30)	1.29 (1.08-1.56)	1.59 (1.31-1.90)	1.81 (1.47-2.16)	2.04 (1.63-2.43)	2.27 (1.79-2.71)	2.59 (1.98-3.08)	2.82 (2.12-3.38)
2-hr	0.701 (0.595-0.836)	0.908 (0.774-1.09)	1.21 (1.02-1.44)	1.44 (1.21-1.72)	1.75 (1.45-2.08)	1.99 (1.63-2.36)	2.24 (1.81-2.65)	2.50 (1.97-2.94)	2.83 (2.18-3.34)	3.10 (2.34-3.67)
3-hr	0.748 (0.636-0.900)	0.958 (0.818-1.16)	1.26 (1.07-1.51)	1.49 (1.26-1.79)	1.82 (1.51-2.17)	2.09 (1.70-2.47)	2.36 (1.89-2.79)	2.64 (2.08-3.13)	3.04 (2.32-3.60)	3.36 (2.50-3.98)
6-hr	0.907 (0.786-1.07)	1.15 (0.997-1.35)	1.47 (1.27-1.72)	1.72 (1.48-2.01)	2.07 (1.75-2.40)	2.34 (1.95-2.71)	2.62 (2.15-3.03)	2.91 (2.35-3.37)	3.31 (2.59-3.83)	3.62 (2.77-4.20)
12-hr	1.03 (0.909-1.18)	1.30 (1.15-1.49)	1.64 (1.44-1.87)	1.91 (1.67-2.17)	2.28 (1.96-2.58)	2.55 (2.18-2.88)	2.84 (2.39-3.21)	3.13 (2.59-3.55)	3.52 (2.85-4.01)	3.82 (3.03-4.38)
24-hr	1.25 (1.12-1.39)	1.58 (1.42-1.76)	2.03 (1.82-2.26)	2.39 (2.14-2.66)	2.89 (2.57-3.20)	3.28 (2.89-3.63)	3.69 (3.22-4.09)	4.12 (3.55-4.56)	4.70 (3.99-5.23)	5.16 (4.33-5.77)
2-day	1.31 (1.18-1.46)	1.67 (1.51-1.87)	2.18 (1.96-2.43)	2.58 (2.32-2.87)	3.14 (2.80-3.48)	3.58 (3.16-3.96)	4.04 (3.54-4.48)	4.52 (3.91-5.02)	5.18 (4.41-5.78)	5.71 (4.80-6.40)
3-day	1.39 (1.26-1.54)	1.77 (1.61-1.97)	2.33 (2.11-2.58)	2.77 (2.51-3.06)	3.40 (3.05-3.74)	3.89 (3.47-4.28)	4.42 (3.91-4.87)	4.98 (4.35-5.48)	5.75 (4.96-6.35)	6.38 (5.43-7.07)
4-day	1.47 (1.35-1.62)	1.88 (1.72-2.07)	2.48 (2.26-2.72)	2.97 (2.69-3.25)	3.65 (3.30-4.00)	4.21 (3.78-4.60)	4.81 (4.28-5.25)	5.43 (4.79-5.94)	6.33 (5.50-6.93)	7.05 (6.07-7.75)
7-day	1.63 (1.49-1.79)	2.08 (1.91-2.28)	2.75 (2.51-3.01)	3.29 (3.00-3.60)	4.05 (3.66-4.42)	4.67 (4.20-5.10)	5.33 (4.75-5.81)	6.02 (5.32-6.58)	7.01 (6.10-7.67)	7.80 (6.72-8.57)
10-day	1.76 (1.61-1.93)	2.25 (2.06-2.46)	2.97 (2.71-3.24)	3.54 (3.23-3.87)	4.35 (3.95-4.74)	5.00 (4.51-5.45)	5.69 (5.09-6.20)	6.41 (5.69-6.99)	7.43 (6.50-8.13)	8.24 (7.15-9.03)
20-day	2.18 (2.00-2.40)	2.81 (2.57-3.09)	3.71 (3.39-4.06)	4.39 (4.00-4.80)	5.31 (4.82-5.80)	6.02 (5.44-6.57)	6.74 (6.06-7.36)	7.46 (6.67-8.17)	8.45 (7.48-9.27)	9.20 (8.09-10.1)
30-day	2.56 (2.34-2.79)	3.29 (3.02-3.59)	4.34 (3.97-4.72)	5.13 (4.68-5.58)	6.20 (5.63-6.75)	7.02 (6.35-7.65)	7.86 (7.08-8.57)	8.72 (7.80-9.51)	9.87 (8.74-10.8)	10.8 (9.45-11.8)
45-day	3.00 (2.74-3.28)	3.87 (3.54-4.22)	5.09 (4.66-5.56)	6.00 (5.48-6.56)	7.20 (6.54-7.86)	8.10 (7.33-8.85)	9.02 (8.12-9.85)	9.93 (8.88-10.9)	11.1 (9.87-12.2)	12.0 (10.6-13.3)
60-day	3.35 (3.07-3.66)	4.33 (3.96-4.73)	5.70 (5.21-6.22)	6.69 (6.10-7.30)	7.98 (7.25-8.70)	8.94 (8.09-9.75)	9.90 (8.92-10.8)	10.8 (9.72-11.9)	12.1 (10.7-13.2)	13.0 (11.5-14.3)

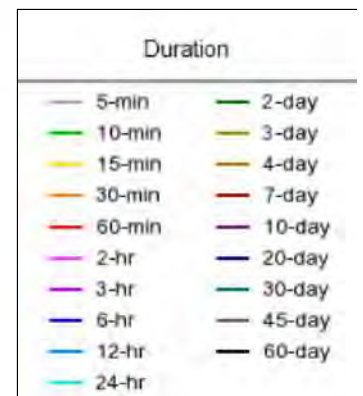
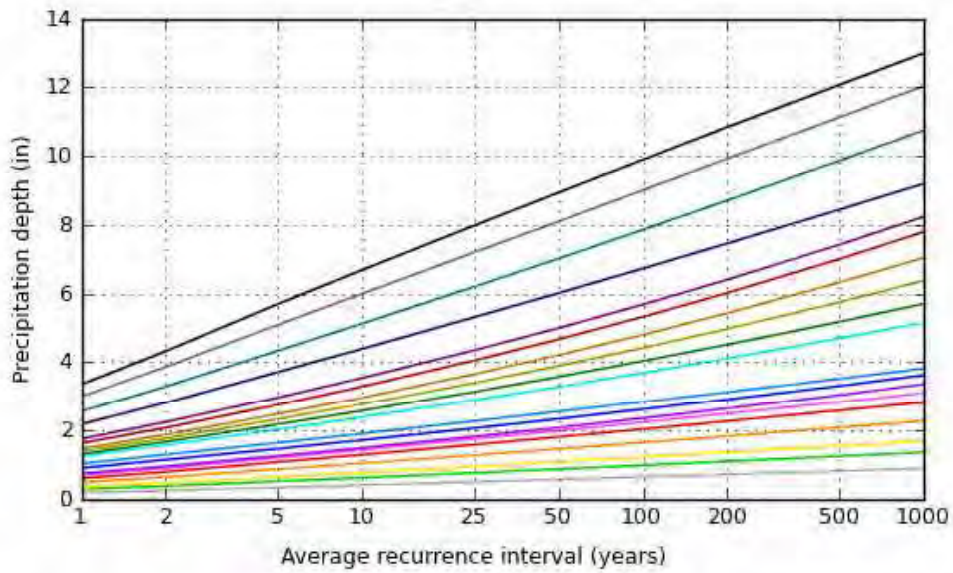
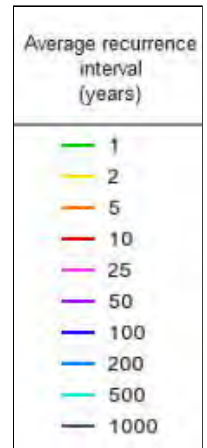
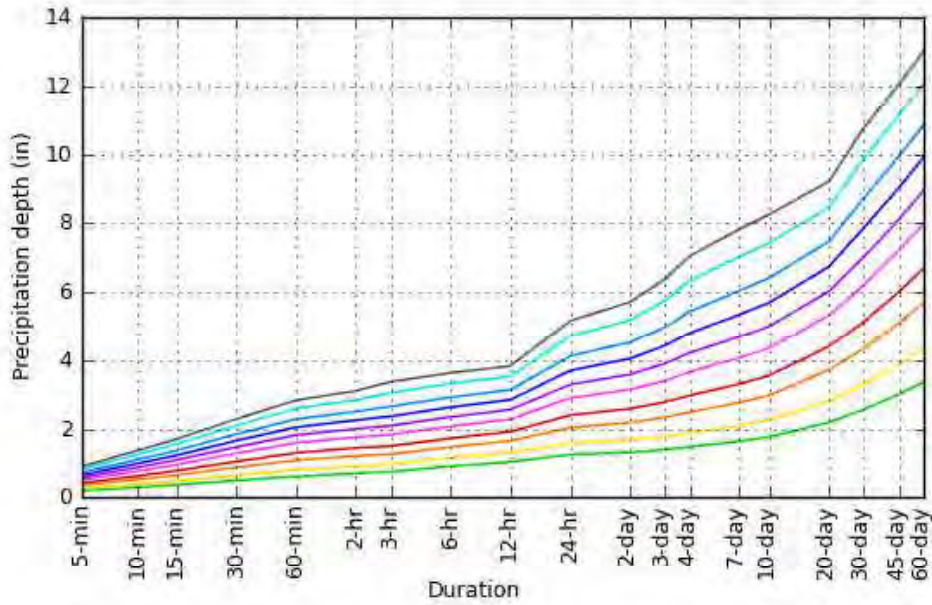
¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical

PDS-based depth-duration-frequency (DDF) curves

Latitude: 33.1923°, Longitude: -111.6047°



Maps & aerials

Small scale terrain



Large scale terrain



Large scale map



Large scale aerial

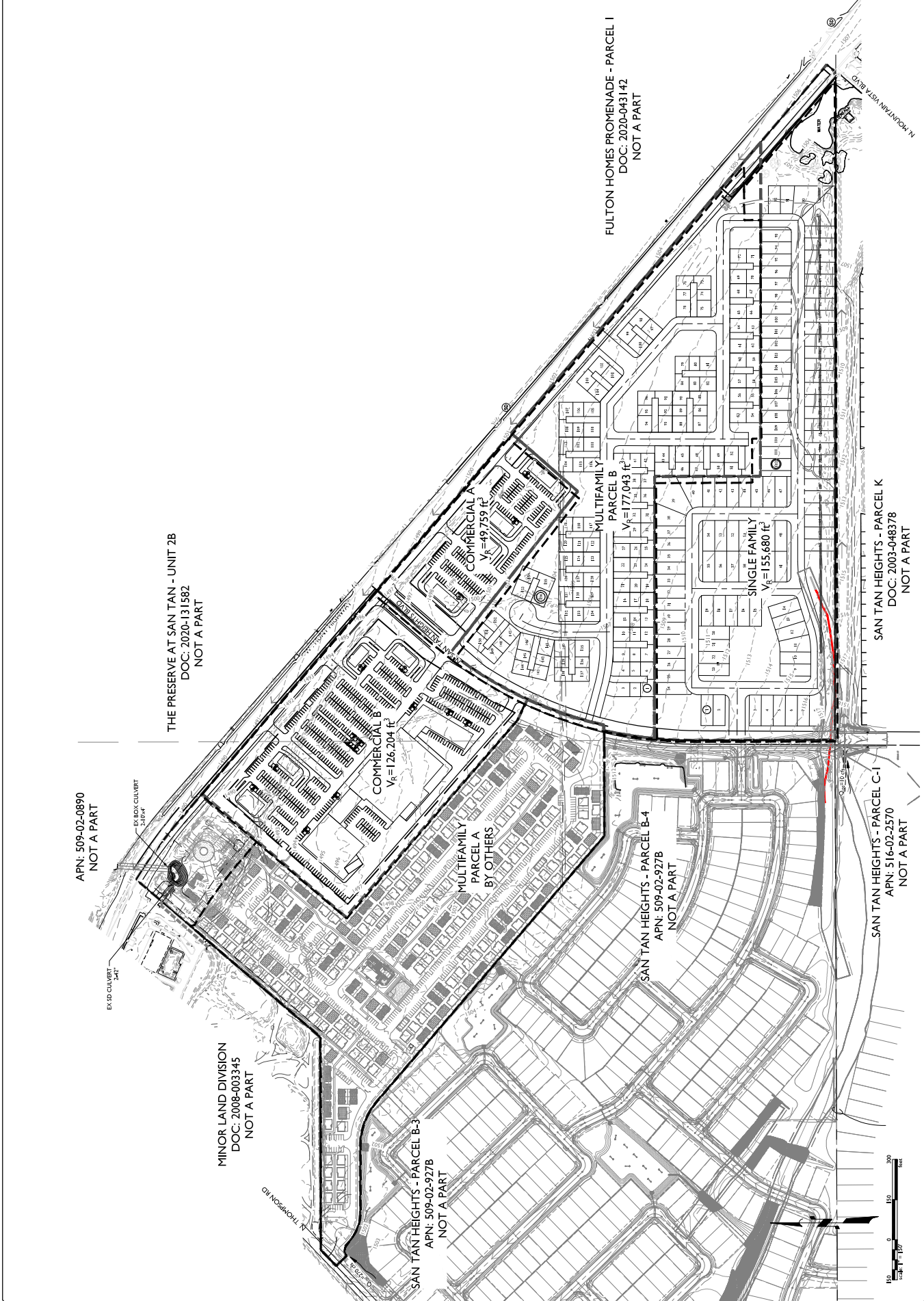


[Back to Top](#)

[US Department of Commerce](#)
[National Oceanic and Atmospheric Administration](#)
[National Weather Service](#)
[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

[Disclaimer](#)

21-0512 - BORGATA/SKYHI



EPS GROUP
 1130 N Alma School Road
 Suite 520
 Mesa, AZ 85201
 T: 480.503.2250 | F: 480.503.2258
 www.epsgroupinc.com

BORGATA/SKYHI
 PINAL COUNTY, AZ
 PRELIMINARY DRAINAGE EXHIBIT

Revisions:
 Project: _____
 Date: _____

Job No. **21-0512**
 PDOI
 Sheet No. **1** of **1**

Scale: _____
 Date: _____
 Prepared by: _____
 Not For Construction Or Recording

Appendix B: Preliminary Retention Calculations

Preliminary Retention Calculations

Project: Borgata/SkyHI
Storm Event: 100-yr, 2-hour
Prepared by: Jorge L. Garcia

Date: 9/10/2021

$$V = C * A * P / 12^{(1)}$$

Where:

V = Runoff Volume (ft³)

C = Runoff Coefficient

A = Drainage Area

P = 2.24 in

Volume Required and Summary

Basin ID	Sub-Basin ID	Sub Basin Area Description	Contributing Area (ft ²)	C =	100 yr Volume Required 100-Yr, 2-Hr (ft ³)	Overflow from Upstream (ft ³)	Overflow from Upstream Retention Basin ID (ft ³)	TOTAL Retention Volume Required 100-Yr, 2-Hr (ft ³)	Total Retention Volume Provided (ft ³)	Overflow Volume 100-Yr, 2-Hr (ft ³)	Overflows to
SF	Single-Family	Lots, R/W, Landscape	1,042,501	0.80	155,680	-	-	155,680	-	-	-
		Total	1,042,501	0.80	155,680						
MDR	MDR Cluster	Lots, R/W, Landscape	1,115,818	0.85	177,043	-	-	177,043	-	-	-
		Total	1,115,818	0.85	177,043						
CA	Commercial A	Buildings, Parking Lot	280,597	0.95	49,759	-	-	49,759	-	-	-
		Total	280,597		49,759						
CB	Commercial B	Buildings, Parking Lot	711,675	0.95	126,204	-	-	126,204	-	-	-
		Total	711,675	0.95	126,204						

TRAFFIC IMPACT ANALYSIS
FOR THE

Borgata at San Tan Valley

Southwest of Hunt Highway east of Thompson Road
Pinal County, Arizona

Prepared for:

Galeb Companies

12340 Saratoga-Sunnyvale Road
Saratoga, CA 95070

Prepared by:



Traffic Impact Analysis
For The
Borgata at San Tan Valley
Southwest of Hunt Highway east of Thompson Road
Pinal County, Arizona

July 13, 2021

UCG Project Number: TR21056

Prepared for:
Galeb Companies
12340 Saratoga-Sunnyvale Road
Saratoga, CA 95070

Prepared by:



2803 N. 7th Avenue
Phoenix, Arizona 85007



Conducted by:

Keith A. Winney, P.E.
Project Manager

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY	3
A. PROJECT SUMMARY	3
B. STUDY OBJECTIVES	3
C. CONCLUSIONS AND RECOMMENDATIONS	3
II. PROPOSED DEVELOPMENT	7
A. SITE LOCATION	7
B. LAND USE	7
C. PHASING AND TIMING	7
D. SITE ACCESSIBILITY	7
III. STUDY AREA CONDITIONS	11
A. STUDY AREA.....	11
B. STUDY AREA LAND USE	11
C. ANTICIPATED FUTURE DEVELOPMENT AND PLANNED IMPROVEMENTS.....	11
C.1. Pinal County Capital Improvement Projects	11
C.2. Adjacent Private Development Projects	12
IV. EXISTING ROADWAY CONDITIONS	13
A. PHYSICAL CHARACTERISTICS	13
B. EXISTING TRAFFIC VOLUMES	17
C. EXISTING INTERSECTION LEVEL OF SERVICE ANALYSES.....	19
D. CRASH DATA	20
D.1. Crashes by Year.....	20
D.2. Crashes by Type.....	20
D.3. Crashes by Severity.....	21
V. BACKGROUND CONDITIONS	24
A. PROJECTED BACKGROUND TRAFFIC	24
B. INTERSECTION LEVEL OF SERVICE ANALYSES – BACKGROUND TRAFFIC.....	28
VI. PROJECTED SITE TRAFFIC	32
A. TRIP GENERATION	32
B. TRIP GENERATION COMPARISON.....	33
C. TRIP DISTRIBUTION AND ASSIGNMENT	34
VII. TOTAL TRAFFIC CONDITIONS AND ANALYSIS	40
A. TOTAL TRAFFIC VOLUMES.....	40
B. ROADWAY IMPROVEMENTS	47
C. SITE ACCESSIBILITY	47
C.1. Accessibility to the Exterior Roadway Network	47
C.2. Intersection Sight Distance	48
D. AUXILIARY TURN LANE ANALYSIS.....	49
D.1. Right-turn Lane Warrants	49
D.2. Left-turn Lanes Warrants	49
D.3. Auxiliary Turn Lane Queue and Storage Length Analysis.....	50
D.4. Dual Left Turn Lanes	51
E. TRAFFIC SIGNAL WARRANT ANALYSIS	53
F. INTERSECTION LEVEL OF SERVICE ANALYSES – TOTAL TRAFFIC	54
F.1. Driveway Throat Lengths	59
VIII. CONCLUSIONS AND RECOMMENDATIONS	60
IX. LIMITATIONS	63
X. SOURCES	64