



**Geotechnical \* Environmental \* Materials Engineering**

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Providing Services in the United States and Internationally URL: [WWW.GTIAZ.COM](http://WWW.GTIAZ.COM)

PHASE I ENVIRONMENTAL SITE ASSESSMENT (ESA) FOR THE 267± ACRES AT

# ALORAVITA SOUTH

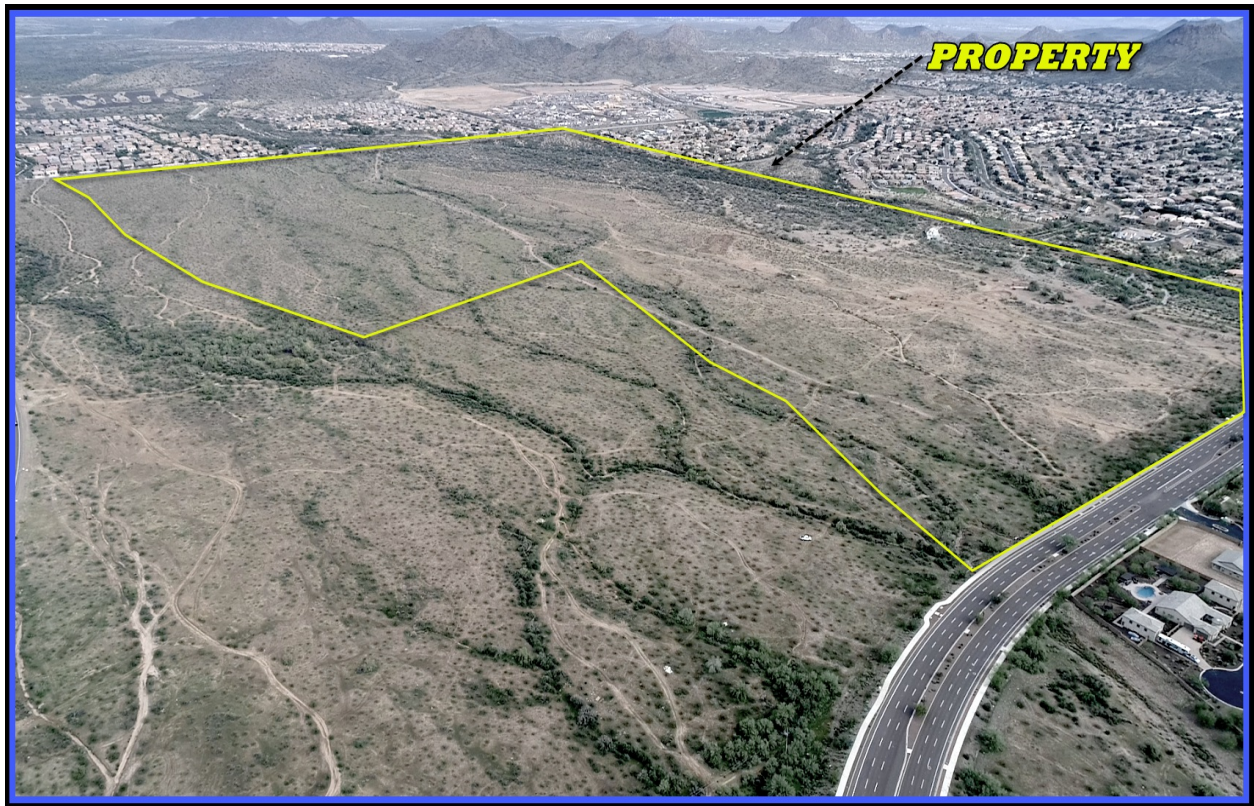
## PARCELS 3 - 8

Located off the Northeast Corner of West Happy Valley Road and North 83<sup>rd</sup> Avenue  
Peoria, Maricopa County, Arizona 85383

January 15, 2020

AAI Expiration Date: July 13, 2020

GTI PROJECT NO. 195738E



Prepared by:

**Geotechnical Testing & Inspections**

7650 East Redfield Road, Suite "D-7"  
Scottsdale, Arizona 85260

[www.gtiaz.com](http://www.gtiaz.com)

Prepared for:

**Ashton Woods - Phoenix Division (Client) and**

**Taylor Morrison / Arizona, Inc. & Lennar Arizona Inc. & Arizona State Land Department**

8767 East Via de Ventura, Suite #390

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January 15, 2020

GTI Project No. 195738E

To: **Ashton Woods - Phoenix Division (Client) and  
Taylor Morrison / Arizona, Inc. & Lennar Arizona Inc.  
& Arizona State Land Department**  
8767 East Via de Ventura, Suite #390  
Scottsdale, Arizona 85258



Attention: **Ms. Mari Flynn**  
Director of Entitlements

Subject: Report of a Phase I Environmental Site Assessment (ESA) for the 267± Acre Property at **ALORAVITA - PARCELS 3 - 8**, Located off the Northeast Corner of West Happy Valley Road and North 83<sup>rd</sup> Avenue, Peoria, Maricopa County, Arizona, 85383.

Dear Ms. Flynn:

In accordance with your request and authorization, Geotechnical Testing & Inspections (**GTI**) has completed the Phase I Environmental Site Assessment (ESA) for the Property. This report was prepared for **Ashton Woods - Phoenix Division (Client) and Taylor Morrison / Arizona, Inc. & Lennar Arizona Inc. & Arizona State Land Department**. The work was completed in general accordance with GTI's Proposal No. MM193742E dated August 1, 2019.

The Phase I Environmental Site Assessment (ESA) is a general characterization of environmental concerns based on readily available information and site observations. GTI has performed this Phase I ESA in general conformance with the scope and limitations of ASTM Practice E-1527-13 for the Property. Any exceptions to, or deletions from this practice are described in Section 1.4 of this report, Limitations and Exceptions of Assessment. The primary purpose for this Phase I Environmental Site Assessment (ESA) was to determine the potential for the presence of hazardous materials/waste contamination at the Property, and to determine whether or not any Recognized Environmental Conditions (REC) exist at the Property. It was **not** the purpose of the Phase I study to determine the actual presence, degree, or extent of contamination, if any, on the Property.

The services performed by GTI on this project have been conducted with that level of care and skill ordinarily exercised by reputable members of the profession, practicing in the same locality, under similar budget and time restraints. No other warranty is expressed or intended.

This report is exclusively for the use and benefit of **Ashton Woods - Phoenix Division (Client) and Taylor Morrison / Arizona, Inc. & Lennar Arizona Inc. & Arizona State Land Department** and may not be relied upon by other persons or entities without written permission from GTI and/or the Client. The scope of services performed in execution of this evaluation may not be appropriate to satisfy the needs of other users, and the use or re-use of this document or the findings, conclusions, or recommendations is at the risk of said users.

The findings and opinions are relevant to the dates of GTI's site work and should not be relied on

**Phase I Environmental Site Assessment (ESA)**

**ALORAVITA SOUTH - PARCELS 3 - 8**

**Ashton Woods - Phoenix Division (Client) and Taylor Morrison / Arizona, Inc. & Lennar Arizona Inc.**

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to represent conditions at substantially later dates. ASTM Practice E1527-13, Section 4.6 states the following:

*This Phase I Environmental Site Assessment (ESA) is valid for a period of only six (6) months from the date of the report. After that time, the Phase I Report will have to be updated.*

The opinions included herein are based on information obtained during the study and GTI's experience. If additional information becomes available which might impact GTI's environmental conclusions, GTI requests the opportunity to review the information, reassess the potential concerns, and modify GTI's opinion, if warranted. As this assessment included a review of reports prepared by other consultants, it must be recognized that GTI has no responsibility for the accuracy of information contained therein. Although this assessment has attempted to identify the potential for contamination of the Property, potential sources of contamination may have escaped detection due to:

- (1) the limited scope of this assessment,*
- (2) the inaccuracy of public records, and*
- (3) the presence of undetected and unreported environmental accidents.*

**This Environmental Site Assessment (ESA) has revealed NO evidence of Recognized Environmental Conditions (REC) in connection with the Property.**

To the best of GTI's professional knowledge and belief, GTI's professional staff meet the definition of *environmental professionals* as defined in §312.10 of 40 CFR §312. GTI technical staff has the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Property. GTI has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

If you have any questions pertaining to this report or any other matter, please do not hesitate to call GTI at (480) 659-6630. GTI appreciates the opportunity to be of service to you.

Sincerely,

**Geotechnical Testing & Inspections (GTI)**

Randy Smith, P.E.  
Environmental Department Manager



Reviewed by:

Dr. Peter Fleming, P.E.  
President



**Phase I Environmental Site Assessment (ESA)**

**ALORAVITA SOUTH - PARCELS 3 - 8**

**Ashton Woods - Phoenix Division (Client) and Taylor Morrison / Arizona, Inc. & Lennar Arizona Inc.**

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**EXECUTIVE SUMMARY**

Geotechnical Testing & Inspections (GTI) was retained by **Ashton Woods - Phoenix Division (Client) and Taylor Morrison / Arizona, Inc. & Lennar Arizona Inc. & Arizona State Land Department** to conduct a Phase I Environmental Site Assessment (ESA) for the 267± acre Property known as **ALORAVITA SOUTH - PARCELS 3 - 8**, located off of the Northeast Corner of West Happy Valley Road and North 83<sup>rd</sup> Avenue, Peoria, Maricopa County, Arizona, 85383.

At the time of our site reconnaissance, the Property was undeveloped desert land. The New River adjoins the Property to the East followed by single family residential homes. According to the Maricopa County Assessor's Map, the Property consists of approximately 267± Acres within a portion of the following Parcel:

- Parcel No. **201-20-581** {267± Acres} - Registered to Patriot American AZ.

Historical aerial photographs indicate the Property was native desert land from at least 1949 to the present day other than for some cleared areas adjoining the New River wash where adjoining gravel mining operations stockpiled aggregate between at least 1986 to 1993.

Development will include the construction of new single family residential homes. At the time of GTI's site reconnaissance, the property consisted of mostly undeveloped desert land.

As the Property has not been used for any agricultural purposes, Organochlorine Pesticide Soil Screen Testing was not required to be performed on surficial soils at the Property. Based upon the lack of agricultural use of the Property and adjoining areas, GTI does not believe that agrochemical contamination is a concern at this Property.

The Phase I ESA for the Property represents the product of GTI's professional expertise and judgement in the environmental consulting industry.

This Phase I ESA was conducted in accordance with the following:

- (1) *The United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries {(AAI), 40 CFR Part 312} and*
- (2) *Guidelines established by the American Society for Testing and Materials (ASTM) in the Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process / Designation E 1527-13 (ASTM Standard Practice E 1527-13).*



**Phase I Environmental Site Assessment (ESA)**

**ALORAVITA SOUTH - PARCELS 3 - 8**

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The purpose of this Phase I Environmental Site Assessment (ESA) was to identify the following with the intent to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations to CERCLA liability:

- ***Current Recognized Environmental Conditions (REC),***
- ***Historical Recognized Environmental Conditions (HREC), and***
- ***Controlled Recognized Environmental Conditions (CREC).***

During the course of this Phase I Environmental Site Assessment (ESA), the Property **was** identified in the governmental database search. In addition, there were **three (3)** other governmental listings identified within the minimum ASTM recommended search radiuses. These listings are discussed individually below:

- The listing at the Property has been identified as Map ID No. "1". The listing is for the **79<sup>th</sup> Avenue Pit** which was a Sand and Gravel Mining Operation. The operation was rather small and since it has no violations, it does not result in a REC to the Property.
- The second listing near the southern portion of the Property has been identified as Map ID No. "2" and it is for the **Happy Valley Road Detention Basin**. This was a construction project permit with no violations; therefore, it does not constitute as a REC to the Property.
- The third and fourth listings have been identified as a cluster of two (2) listings registered to the **Arizona Crushers Inc.**, located approximately 187± feet east to northeast of the Property. This listing is also related to the mining operations in the area and were involved with the crushing of the Sand and Gravel being mined. As there are no violations associated with these listings, they do not pose a REC to the Property.

This Phase I Environmental Site Assessment (ESA) concluded the following:

- ***Current Recognized Environmental Conditions (REC)***  
*A 'Recognized Environmental Condition (REC)' as defined in the ASTM Standard, is the presence, or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De-minimis conditions are not recognized environmental conditions." This assessment has revealed **NO** evidence of Recognized Environmental Conditions (REC) at the Property.*

**Phase I Environmental Site Assessment (ESA)**

**ALORAVITA SOUTH - PARCELS 3 - 8**

**Ashton Woods - Phoenix Division (Client) and Taylor Morrison / Arizona, Inc. & Lennar Arizona Inc.**

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- **Historical Recognized Environmental Conditions (HREC)**

*A 'Historical REC (HREC)' as defined in the ASTM Standard, is a past release of any hazardous substance and/or petroleum product that has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria. No known past releases were associated with the Property. **This assessment has revealed NO evidence of Historical Recognized Environmental Conditions (HREC) at the Property.***

- **Controlled Recognized Environmental Conditions (CREC)**

*A 'Controlled REC (CREC)' as defined in the ASTM Standard, is a REC resulting from a past release of hazardous substances and/or petroleum products in which the regulatory agency has allowed contamination to remain in place at the property which is subject to the implementation of required controls and/or restrictive use. **This assessment has revealed NO evidence of Controlled Recognized Environmental Conditions (CREC) at the Property.***

Based on GTI's Phase I Environmental Site Assessment (ESA), GTI makes the following statement in general accordance with ASTM specifications:

GTI has performed a Phase I Environmental Site Assessment (ESA), in general conformance with the scope and limitations of ASTM Practice E-1527-13, for the **ALORAVITA SOUTH - PARCELS 3 - 8**, located off the Northeast Corner of West Happy Valley Road and North 83<sup>rd</sup> Avenue, Peoria, Maricopa County, Arizona, 85383. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report.

- **This Environmental Site Assessment (ESA) has revealed No evidence of Recognized Environmental Conditions (REC),**
- **Historical Recognized Environmental Conditions (HREC) or**
- **Controlled Recognized Environmental Conditions (CREC) in connection with the Property.**

Based on GTI's site reconnaissance, governmental database records review, and conversations with people familiar with the Property, GTI does not believe any additional environmental testing or studies are needed at the Property at this time.

\*\*\*\*\*

*Detailed Information is Provided in the Report*

**Phase I Environmental Site Assessment (ESA)**

**ALORAVITA SOUTH - PARCELS 3 - 8**

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## Phase I Environmental Site Assessment (ESA)

### ALORAVITA SOUTH - PARCELS 3 - 8

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## 1.0 INTRODUCTION

The Phase I ESA for the Property represents the product of GTI's professional expertise and judgement in the environmental consulting industry. This Phase I Environmental Site Assessment (ESA) was conducted in general accordance with:

- (1) *The United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries {(AAI), 40 CFR Part 312} and*
- (2) *Guidelines established by the American Society for Testing and Materials (ASTM) in the Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process/Designation E 1527-13 (ASTM Standard Practice E 1527-13).*

### 1.1 Authorization and Site Location

In accordance with your request and authorization, Geotechnical Testing & Inspections (GTI) has completed this Phase I Environmental Site Assessment (ESA) report for the proposed 267± Acre single-family home subdivision located within **ALORAVITA SOUTH - PARCELS 3 - 8**.

A general site plan showing the Property (*highlighted in green*) is shown on Figure 1.

The Property is located within the Northwest, Northeast, and Southeast Quarters of Section 2, Township 4 North, Range 1

East of the Gila and Salt River Base and Meridian, Peoria, Maricopa County, Arizona 85383. A general site vicinity map is shown on Figure 2. An aerial photograph of the Property and surrounding area is shown on Figure 3.

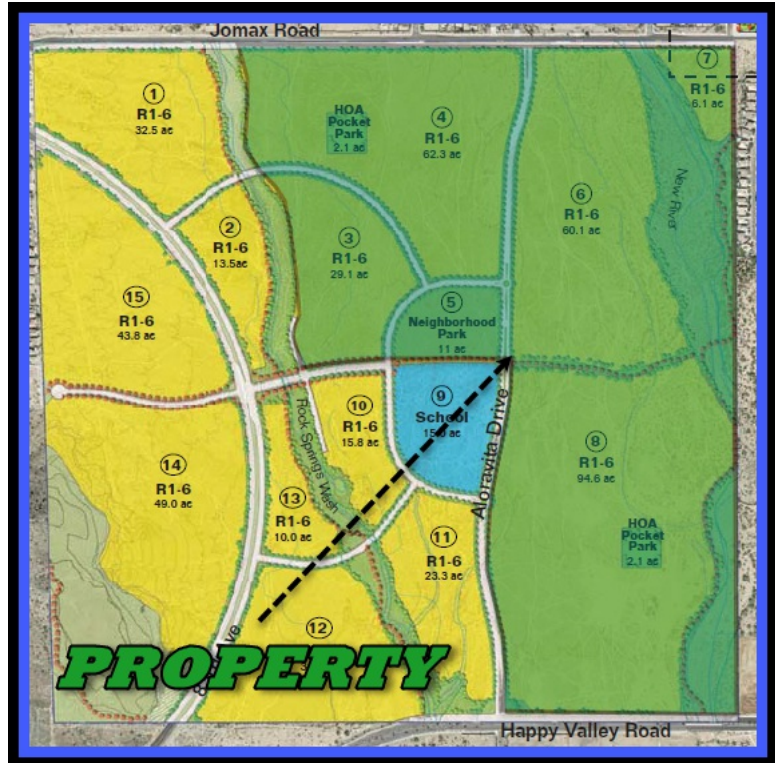


Figure 1 - Approximate Property Location Map



**Phase I Environmental Site Assessment (ESA)**  
**ALORAVITA SOUTH - PARCELS 3 - 8**  
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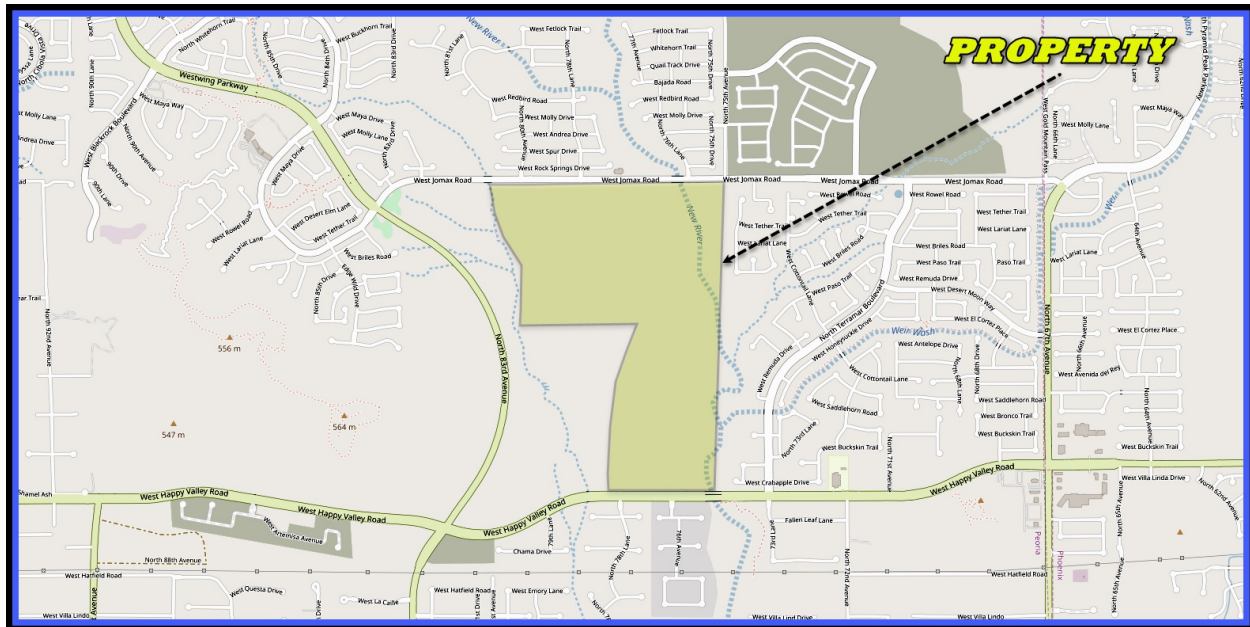
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*Figure 2 - Property Location and General Vicinity Map*



*Figure 3 - Aerial Photograph of the Property*



**Phase I Environmental Site Assessment (ESA)**

**ALORAVITA SOUTH - PARCELS 3 - 8**

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**1.2 Purpose**

The purpose of this Phase I Environmental Site Assessment (ESA) was to identify the following with the intent to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations to CERCLA liability:

- ***Current Recognized Environmental Conditions (REC),***
- ***Historical Recognized Environmental Conditions (HREC), and***
- ***Controlled Recognized Environmental Conditions (CREC).***

According to GTI's client, this Phase I ESA was conducted as part of an environmental due diligence related to purchasing the Property for the development of Single Family Residential Homes.

While completion of a Phase I ESA is intended to constitute one of the requirements of all appropriate inquiry for purposes of Comprehensive Environmental Response Compensation and Liability Act (CERCLA) liability protections, it is not intended its use be limited to that purpose.

This practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser on CERCLA liability (hereinafter, the "landowner liability protections," or "LLPs"): that is, the practice constitutes all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial and customary practice as defined at 42 U.S.C. §9601(35)(B).

In addition, other properties within the approximate minimum search distance of the Property, as specified by the ASTM document E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process are examined for their possible environmental impact to the Property. The term '*Recognized Environmental Conditions*' (*RECs*) is not intended to include *de-minimis* conditions that generally does not present a threat to human health of the environment and generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. The scope consists of the following categories of work activities designated to meet the CERCLA/SARA appropriate inquiry responsibilities for a Phase I Environmental Site Assessment:

**Phase I Environmental Site Assessment (ESA)**

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1. A review of project information provided by the client, including historical geotechnical and environmental reports for the Property;
2. A site reconnaissance of the Property and surrounding areas to visually assess current site utilization, and to check for indications of potential surface contamination;
3. A review of readily available historical aerial photographs, site maps, soil maps, street directories, site drainage and other sources to evaluate past land uses;
4. An evaluation of the Property's soil characteristics, and hydrogeologic setting;
5. Interview with appropriate and reasonably available individuals knowledgeable about the Property and environmental factors in the area of the Property;
6. A review of the Property's historical land utilization for indications of potential contamination or sources of contamination;
7. A review of government documents and interviews with appropriate government agencies concerning available pertinent environmental information for the Property or within various radii of the Property;
8. Preparation of this report, which relates the findings of these studies and presents GTI's conclusions and recommendations.

**1.3 Special Terms and Conditions**

This Phase I Environmental Site Assessment (ESA) report has been prepared for **Ashton Woods - Phoenix Division (Client) and Taylor Morrison / Arizona, Inc. & Lennar Arizona Inc.** and is subject to the terms and conditions of the contract. No other person or entity may rely on this report without prior written consent from GTI or the Client. The conclusions and recommendations of this report are based solely on the information gathered as a result of performing the Phase I Environmental Site Assessment scope and work process. The report reflects historical information and site conditions with respect to the Property which existed at the time of completion of this report. Future changes in the site conditions of the Property and future information generated regarding the Property may result in a need to re-assess the environmental aspects of the property.

**Phase I Environmental Site Assessment (ESA)**

**ALORAVITA SOUTH - PARCELS 3 - 8**

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#### **1.4 Limitations and Exceptions of Assessment**

A Phase I Environmental Site Assessment (ESA) by definition is limited to the scope as outlined in the ASTM document E 1527-13, Standard Practice for Environmental Assessments: Phase I Environmental Site Assessment Process. Information sources used for this Phase I Environmental Site Assessment are limited to the following:

- *Visual assessment made during the site reconnaissance.*
- *Interviews with persons knowledgeable about the Property, including owners, operators, and governmental officials.*
- *Review of available public environmental databases.*
- *Review of available aerial photographs.*
- *Review of readily available historical reports prepared for the Property.*

Subjects not addressed by this report are as follows:

- *Hazardous or toxic materials and/or chemicals not presently regulated by federal, state, and local government agencies.*
- *Hazardous or toxic substances that occur naturally in air, soil, and/or water.*
- *Toxicity of substances found in residential environments (i.e. stored household products and miscellaneous building materials).*
- *Additional non-scope considerations are listed below:*

1. Asbestos-Containing Building Materials
2. Biological agents
3. Cultural and historic resources
4. Ecological resources
5. Endangered species
6. Health and safety
7. Indoor air quality unrelated to releases of hazardous substances of petroleum products in the environment
8. Industrial hygiene



**Phase I Environmental Site Assessment (ESA)**

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- 9. Lead-Based Paint
- 10. Lead in Drinking Water
- 11. Mold
- 12. Radon
- 13. Regulatory compliance
- 14. Wetlands

During GTI's site reconnaissance, materials on the Property were not disturbed and underlying conditions were not observed. No physical environmental subsurface exploration for was conducted at the Property.

It should be noted this Phase I ESA did not comply with the ASTM E2600-10 "*Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*". For assessment of potential "*Vapor Encroachment Conditions*" (VEC) and to determine if a "*Vapor Intrusion Condition*" (VIC) exists at this Property, additional investigation beyond ASTM E1527-13 is required. GTI can be retained to provide this service, if desired.

American Society for Testing Materials Standard Practice E-1527-13, Section 4.0, notes the following limiting concepts inherent in the use of Phase I Site Assessments should be understood by those who use Phase I reports:

- (1) No environmental site assessment can wholly eliminate uncertainty regarding the potential for environmental conditions in connection with a property.*
- (2) All appropriate inquiries does not mean an exhaustive assessment of a property.*

There is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information. One of the purposes of ASTM specification E-1527-13 is to identify a balance between competing goals of limiting cost and time demands and the reduction of uncertainty about unknown conditions resulting from additional information.

### **1.5 Reviewed Reports Provided by Client or Available in GTI's Library**

As part of GTI's Phase I Environmental Site Assessment (ESA), GTI typically reviews historical geotechnical and/or environmental reports provided to GTI by the client or available in GTI's files. GTI reviewed the following reports:

**Phase I Environmental Site Assessment (ESA)**

**ALORAVITA SOUTH - PARCELS 3 - 8**

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- *January 27, 2004* - **Pavement Thickness Recommendations for Rock Springs Development**, - The report was prepared by Geo-Technologies, Inc., as Project No. 042920G. The report was prepared for **Courtland Homes, Inc.**
- *March 20, 2004* - **Geotechnical Subsurface Exploration - Terramar Cove**. The report was prepared by Construction Testing and Inspection, Inc. as Job No. 14-G-3735 The report was prepared for **Terramar Cove, LLC**.
- *June 1, 2004* - **Geotechnical Post-Tensioned Slab Recommendations for Rock Springs Development**, - The report was prepared by Geo-Technologies, Inc., as Project No. 042920G. The report was prepared for **Courtland Homes, Inc.**
- *April 25, 2006* - **Storm Water Percolation Testing for Rock Springs III Development**, - The report was prepared by Geo-Technologies, Inc., as Project No. 064218G. The report was prepared for **Courtland Homes, Inc.**
- *July 31, 2015* - **Geotechnical Post-Tensioned Slab Recommendations for Terramar Cove Development**, - The report was prepared by Geotechnical Testing & Inspections (GTI) as Project No. 154021G. The report was prepared for **Courtland Communities**.
- *April 27, 2018* - **Phase I Environmental Site Assessment for Aloravita Development - Parcel 8**, - The report was prepared by Geotechnical Testing & Inspections (GTI) as Project No. 185021E. The report was prepared for **Ashton Woods**.

## **2.0 PROPERTY DESCRIPTION AND RECONNAISSANCE OBSERVATIONS**

An experienced GTI Sr. Project Manager conducted a site and border zone area reconnaissance of the Property and the readily accessible areas of the adjacent properties on December 27, 2019. GTI's site reconnaissance did not include an inspection of existing nearby structures.

The primary purpose of the site reconnaissance was to observe visual indications of present or past activities, which have or could have contributed to contamination on the Property, and to interview people familiar with the Property.

The site reconnaissance was conducted on foot, while the area reconnaissance was conducted by use of a vehicle and a drone. Details of GTI's site and border zone area reconnaissance are provided in the following sections. An aerial photograph of the Property looking south is shown on Figure 4.

**Phase I Environmental Site Assessment (ESA)**

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*Figure 4 - Aerial Photograph Looking South Across the Property*

## **2.1 Site/Project Description and Reconnaissance**

### **2.1.1 General**

At the time of GTI's site reconnaissance, the Property consisted of two-hundred-sixty-seven and 4 tenths (267+) acres of mostly native desert land planned for development as a single family residential development known as **ALORAVITA SOUTH - PARCELS 3 - 8**. The Property had a overall downward slope towards the south and a light to moderate growth of desert vegetation. The Property is bounded by Jomax Road, an asphaltic concrete paved arterial roadway on the north, the New River on the east, by Happy Valley Road, an asphaltic concrete paved arterial roadway on the south, and undeveloped desert land on the west.

GTI received a concept lotting for the **ALORAVITA SOUTH DEVELOPMENT** prepared by CVL Consultants, Inc dated July, 19, 2019. A portion of the provided concept lotting is shown on Figure 5. According to the Maricopa County Assessor's Map, the Property consists of approximately 267± Acres within a portion of the following Parcel:

- Parcel No. **201-20-581** {267± Acres} - Registered to Patriot American AZ.



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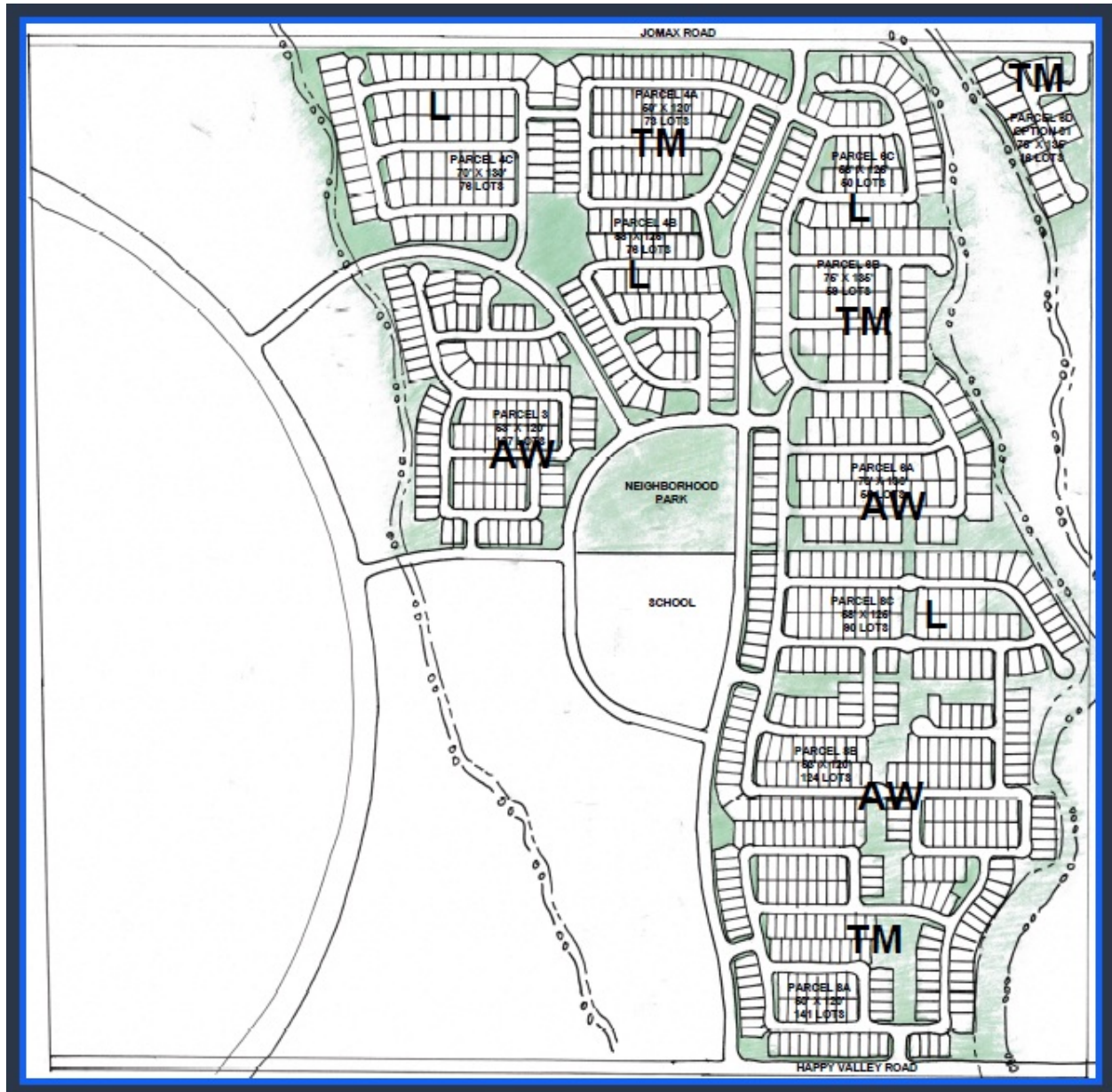
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*Figure 5 - Concept Lotting for Aloravita South Development*

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**2.1.2 Photographic Records & Aerial Video Recordings**

Numerous representative color photographs and aerial video recordings have been taken of the overall Property. These photographs and aerial video recordings are in GTI's files and available for viewing, if desired. Select photographs are included in various sections of this report.

**2.1.3 Underground and/or Above Ground Storage Tanks**

GTI did not observe any Underground Storage Tanks (USTs) or Above Ground Storage Tanks (ASTs) within the Property.

**2.1.4 Hazardous Materials**

GTI did not observe any hazardous chemicals within the Property.

**2.1.5 PCB Electrical Transformers**

GTI observed ground-mounted electrical transformers located along Happy Valley Road, all on or adjoining the Property appeared to be in good condition. No leaks or stains were noted. GTI spoke with Arizona Public Service (APS) who provides power to the area and APS indicated they have removed the PCBs from their electrical transformers and replaced them with mineral oil. Thus, they do not have any PCB-related environmental issues.

**2.1.6 Drywells**

GTI did not observe any drywells within the two-hundred-sixty-seven (267±) acres encompassing the Property.

**2.1.7 Water Features**

GTI did not observe any signs of wetlands (i.e., open water, marshes, and marsh-type vegetation) at the Property. The Property adjoins the New River on its eastern boundary. Rock Creek Wash is located west of the Property. Figure 6 shows the approximate Property location and the New River to the east and the Rock Creek Wash to the west.

**2.1.8 Pesticides and Herbicides**

Historical aerial photographic review indicates that the Property was undeveloped desert land at least as far back as 1949. As there has been no agricultural uses of the Property, agrochemical contamination is not a concern.



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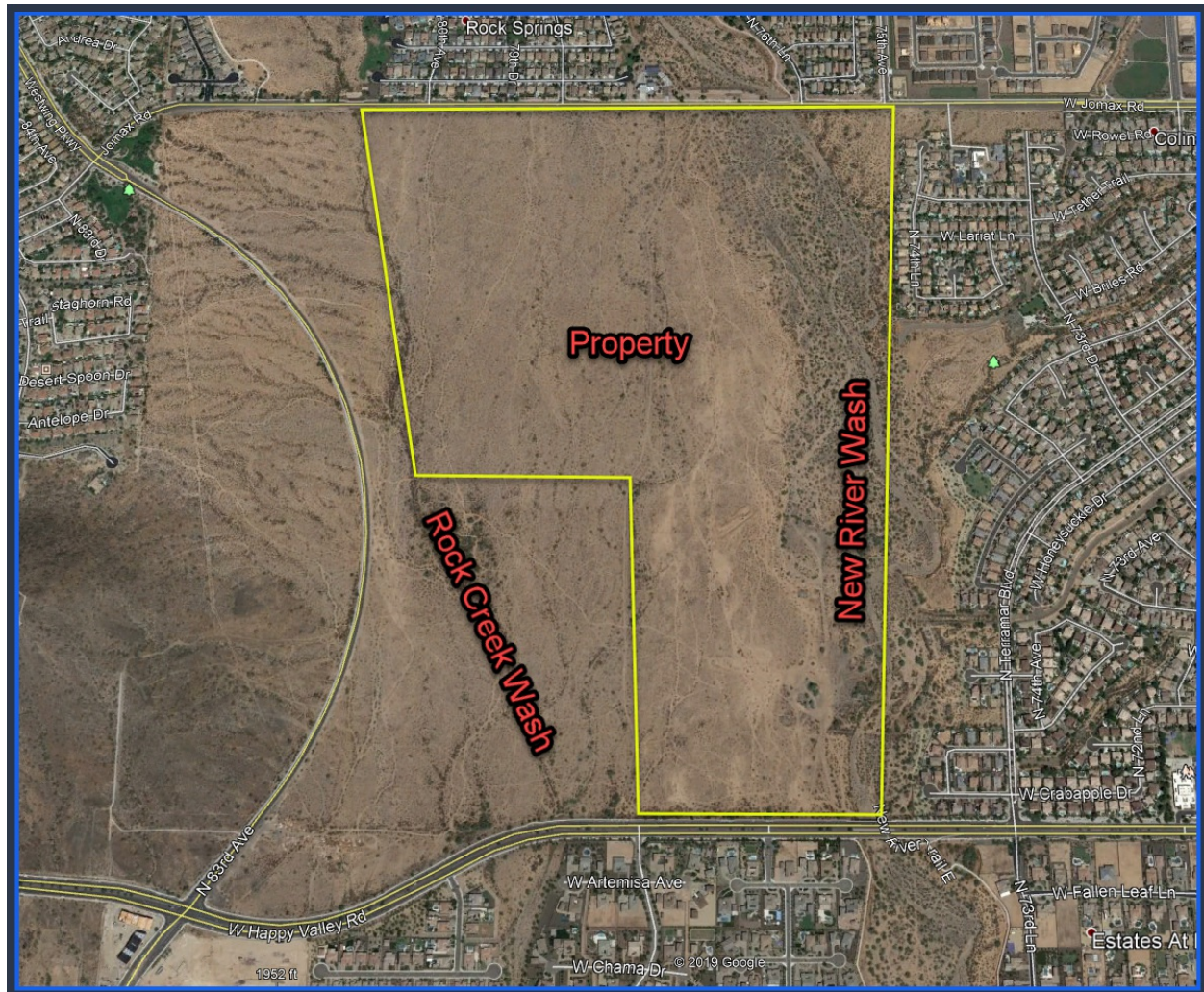
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*Figure 6 - Approximate Property Boundaries and Adjoining Waterways*

## 2.2 Area Reconnaissance

The area reconnaissance was performed to assist in evaluating the potential for adjacent land uses, which could have adversely impacted the Property. The area reconnaissance was conducted by traversing the area on foot, and viewing the surrounding areas from the Property. The properties surrounding the Property include:

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**2.2.1 North**

North of the area of the Property is an arterial road (West Jomax Road) followed by native desert land with the New River wash to the east and West Jomax Road to the North, followed by Peoria Fire Department Station 197 and the Rock Springs residential subdivisions. GTI does not believe activities at these locations result in a REC to the Property. An aerial photograph looking north of the Property is shown on Figure 7.



*Figure 7 - Aerial Photograph Looking North of the Property*

**2.2.2 South**

South of the area of the Property is an arterial road (West Happy Valley Road) followed by the Vista Montana and Caballos Del Rio residential subdivisions with the New River wash to the east. GTI does not believe activities at these locations result in a REC to the Property. An aerial photograph looking south of the Property is shown on Figure 8.

**2.2.3 East**

East of the area of the Property is the New River wash with residential subdivisions east of the watercourse. GTI does not believe activities at these locations result in a REC to the Property. An aerial photograph looking east of the Property is shown on Figure 9.

**2.2.4 West**

West of the Property is undeveloped desert land followed by North 83<sup>rd</sup> Avenue. GTI does not believe activities at these locations result in a REC to the Property. An aerial photograph looking west of the Property is shown on Figure 10.



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*Figure 8 - Aerial Photograph Looking South of the Property*



*Figure 9 - Aerial Photograph Looking East of the Property*



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*Figure 10 - Aerial Photograph Looking West of the Property*

### **3.0 LOCAL SOIL AND HYDROGEOLOGIC SETTING**

A consideration of surface and subsurface drainage and soil conditions are of interest since they provide an indication of how off-site contaminants, if present, could be transported to the property. Readily available hydrogeologic information was reviewed to evaluate surface and subsurface characteristics of the Property and the general vicinity. This section summarizes the results of the hydrogeologic evaluation.

#### **3.1 Soil Conditions**

The U.S. Department of Agriculture's (USDA) Soil Conservation Service classifies the surficial soils at the Property as Gilman loam and Antho sandy loam. These soil types have moderate infiltration rates, are deep and moderately deep, moderately well and well drained soils with moderately coarse textures. The USCS soil classifications of these soils are mostly granular Silty SAND (SM) and gravels. As groundwater is relatively deep, most contamination, if any, would be filtered out prior to reaching the groundwater table.

#### **3.2 Hydrogeology**

##### **3.2.1 Groundwater**

GTI reviewed the Arizona Department of Water Resources (ADWR), Hydrologic Map, series report No. 35, dated 2003. Groundwater flow in the general vicinity of the Property is in a south-southwesterly direction.

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The groundwater at the Property appears to range from 450± feet to 475± feet below existing ground surface. A partial copy of the ADWR map showing the location of the Property, the existing groundwater wells, and the general groundwater flow is shown on Figure 11.

In addition, GTI reviewed the Arizona Groundwater Well Data for a well located approximately ¼± mile northeast of to the Property. A groundwater hydrograph for that well indicated that groundwater in 1982 was at 394± feet below the ground surface, in 1984 it was at a depth of 351± feet below the ground surface. In 1982, the water level was at 357± feet below the ground surface. A copy of this groundwater hydrograph is shown on Figure 12.

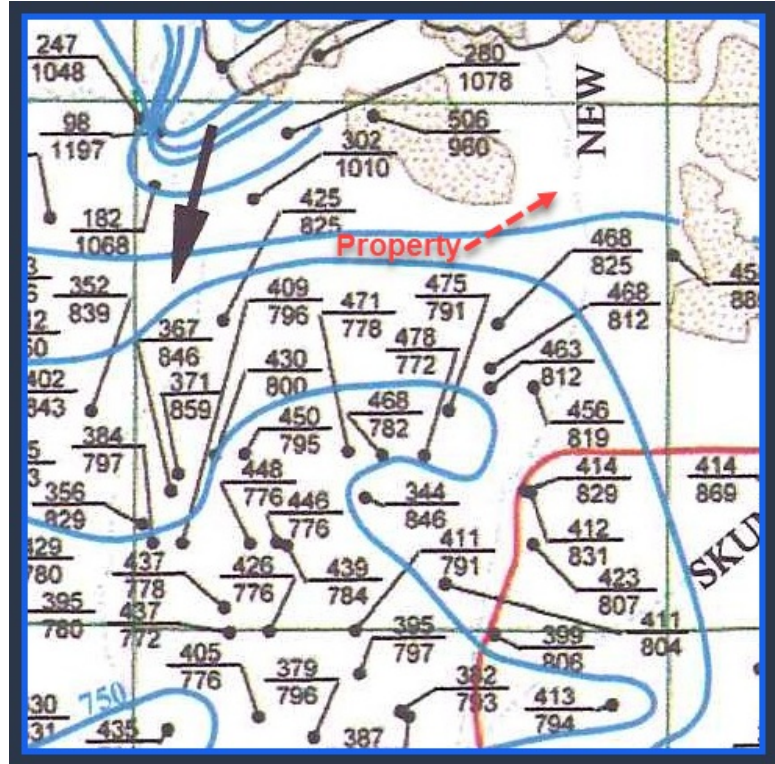


Figure 11 - ADWR Groundwater Map

### 3.2.2 Flood Plains

According to the Federal Emergency Management Agency (FEMA) Flood Map Database for Maricopa County, Arizona and Incorporated Areas, the majority of the Property is **not** located within an area designated as being in a 100 year flood zone. The majority of the Property is located within Flood Zone “X”.

The eastern edge of **ALORAVITA SOUTH - PARCELS 3 - 8** Property is located in an area designated as Zone “AE”. Portions of the eastern Property boundary are in close proximity to areas designated as Floodway Flood Panel No.04013C1255L (effective date: October 16, 2013) was reviewed. A partial copy of the FEMA Flood Insurance Rate Map is shown on Figure 13.

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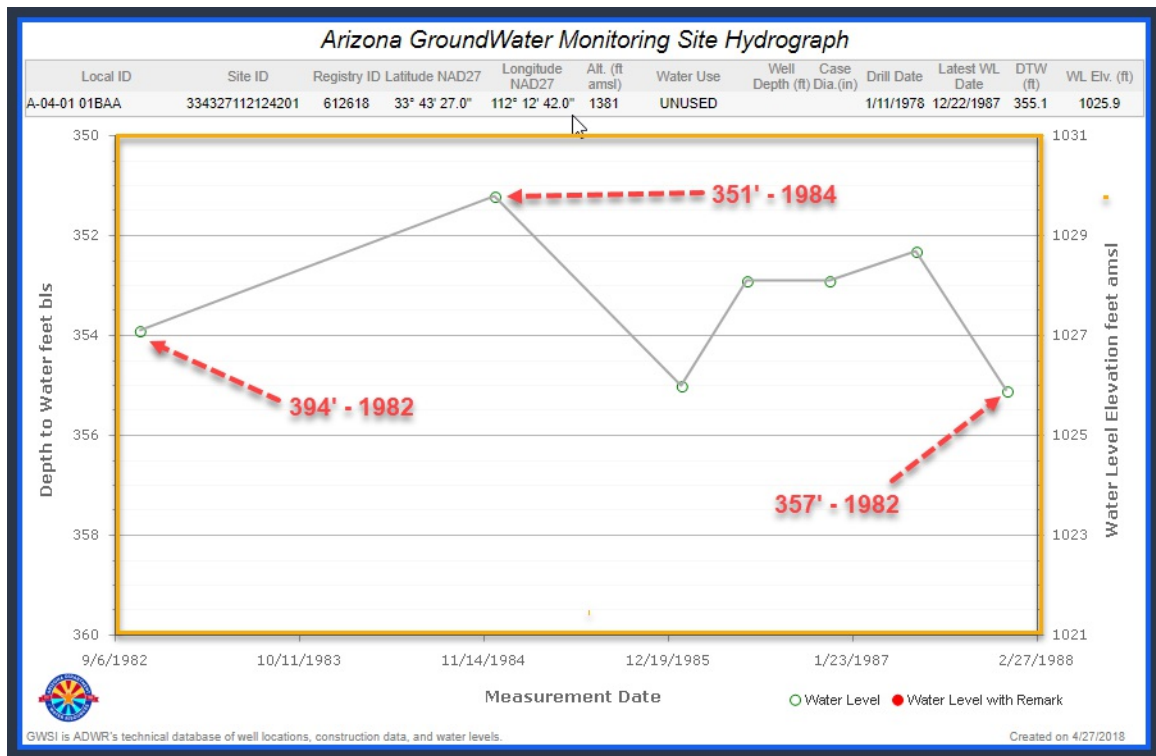


Figure 12 - Nearby Water Well Hydrograph

Flood Zone “X” are moderate risk areas within the 0.2 percent annual chance floodplain, areas of 1 percent chance flooding where average depths are less than 1 foot, areas of 1 percent annual chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1 percent annual chance flood by a levee. Flood insurance is **not** required within Flood Zone “X”.

Flood Zone “AE” are areas subject to inundation by the 1-percent annual chance flood event determined by detailed methods. Base Flood Elevations are shown within these zones. Flood insurance **is** required within Flood Zone “AE”.



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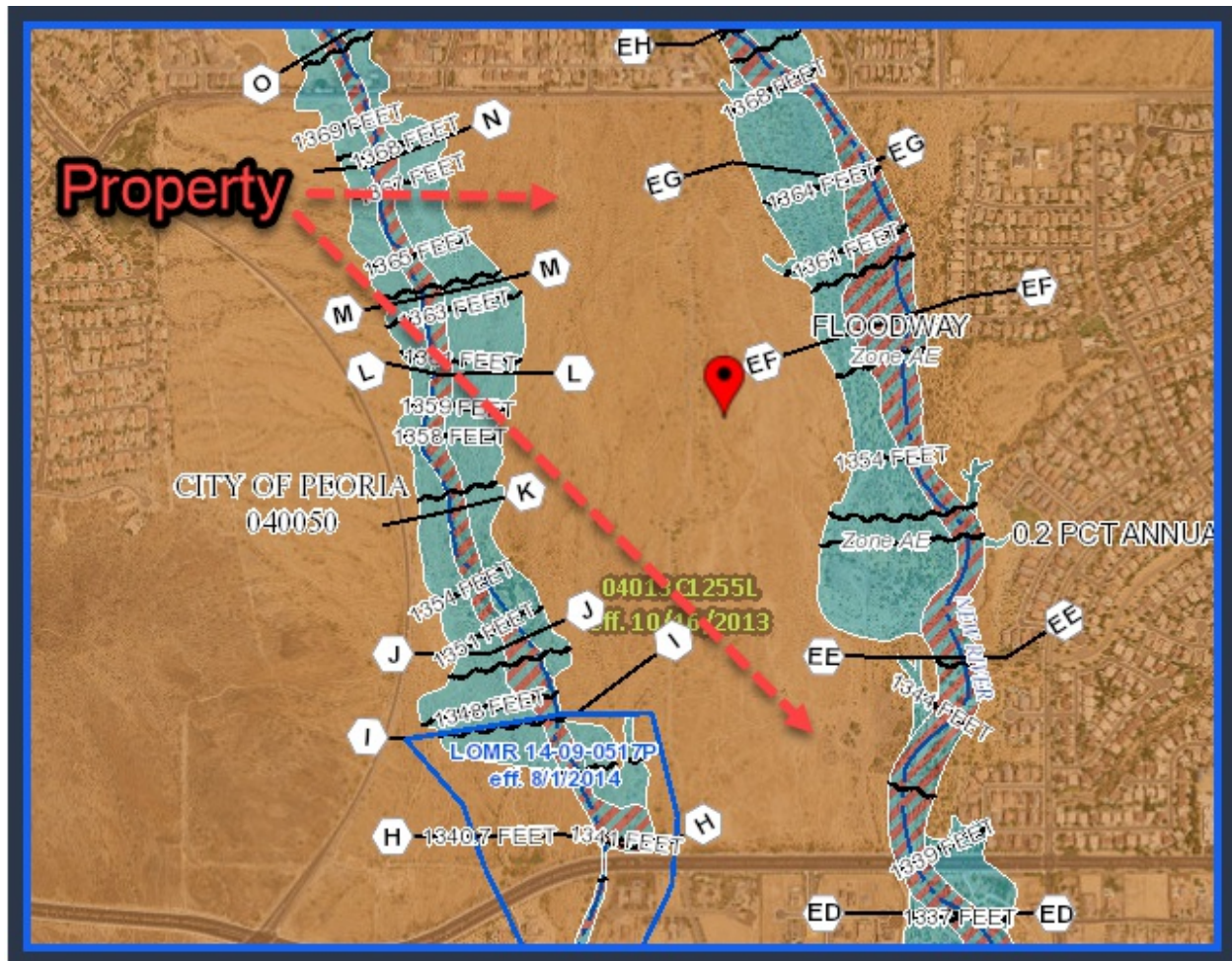


Figure 13 - FEMA Flood Insurance Rate Map

### 3.2.3 Surface Water

According to a 2014 United States Geologic Survey Map (USGS *Hedgpeth Hills* 7.5 Minute Series Topographic Map, surface water is flowing in a Northeasterly direction. Surface elevations across the Property excluding the New River channel range from El: 1,344± feet at the southeast corner of the Property to El: 1,357+ feet near the northwest corner of the Property. As the Property consists of undeveloped desert land, surface water will generally flow towards the south and towards the adjoining washes to the east and west of the Property. A copy of the USGS map is shown on Figure 14.

- *Google Earth - Photos dated 1992 to 2019*
- *Flood Control District of Maricopa County - Photos dated 1949 to 2018*
- *Maricopa County Assessors Map - Photos dated 2011 to 2018*
- *Hedgpeth Hills Quadrangle, Arizona - Maricopa 7.5 minute series topographic maps (dated 2014)*
- *Historical topographical maps - 1957 to 2014*
- *Nearmap - September 17, 2019*



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4.1 Aerial Photographic Review

Aerial photographs from 1949 to 2019 were reviewed. The table on the following pages identifies GTI's observations from these aerial photographs.

AERIAL PHOTOGRAPHIC REVIEW	
DATE	FINDINGS
2016 - 2019	<p><b>Site:</b> <i>Native Desert With Some Cleared Areas Adjoining New River Wash</i></p> <p><b>North:</b> <i>Jomax Rd. With Residential Developments Further North</i></p> <p><b>South:</b> <i>Happy Valley Rd. With Residential Developments Further South</i></p> <p><b>East:</b> <i>New River Wash, Former Gravel Pits; and Residential Development</i></p> <p><b>West:</b> <i>Native Desert</i></p>



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<p>2004 - 2015</p>	<p><b>Site:</b> <i>Native Desert With Some Cleared Areas Adjoining New River Wash</i></p> <p><b>North:</b> <i>Same As Above</i></p> <p><b>South:</b> <i>Same As Above</i></p> <p><b>East:</b> <i>Same As Above</i></p> <p><b>West:</b> <i>Same As Above</i></p>	
<p>1999 - 2004</p>	<p><b>Site:</b> <i>Native Desert With Some Cleared Areas Adjoining New River Wash</i></p> <p><b>North:</b> <i>Jomax Rd. (Unpaved) with Desert further North</i></p> <p><b>South:</b> <i>Native Desert</i></p> <p><b>East:</b> <i>New River Wash, Former Gravel Pits; desert, and Residential Development</i></p> <p><b>West:</b> <i>Native Desert</i></p>	

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<p>1976 - 1997</p>	<p><b>Site:</b> <i>Native Desert with Some Stockpiles from Gravel Mining Along New River Wash</i></p> <p><b>North:</b> <i>Native Desert</i></p> <p><b>South:</b> <i>Native Desert</i></p> <p><b>East:</b> <i>Native Desert with Gravel Mining Within Portions of the New River Wash</i></p> <p><b>West:</b> <i>Native Desert</i></p>	
<p>1949 - 1976</p>	<p><b>Site:</b> <i>Native Desert</i></p> <p><b>North:</b> <i>Native Desert</i></p> <p><b>South:</b> <i>Native Desert</i></p> <p><b>East:</b> <i>Native Desert</i></p> <p><b>West:</b> <i>Native Desert</i></p>	



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**4.2 Sanborn Maps**

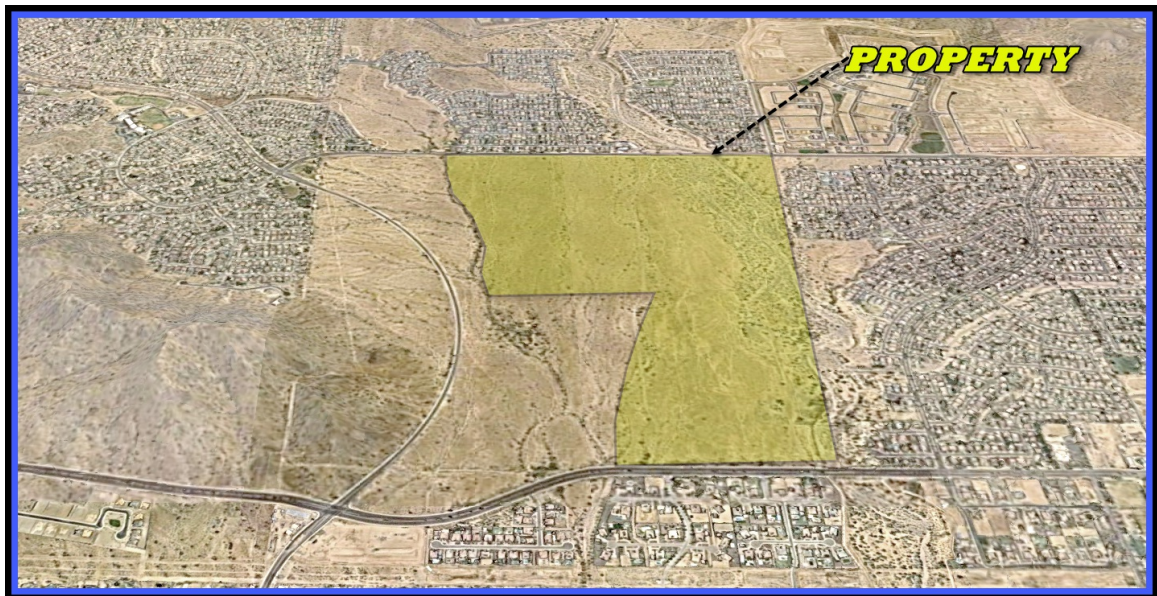
No Sanborn Maps were available for this property.

**4.3 Cole Directories**

No Cole Directories were reviewed for the Property as there was no physical address or development on the Property.

**4.4 General Site History**

Based on the review of the historical aerial photographs, GTI's site reconnaissance, and conversations with people familiar with the Property, the Property was native desert land from at least 1949 to the present day other than for some cleared areas adjoining the New River wash where adjoining gravel mining operations stockpiled aggregate between at least 1986 to 1993. Figure 15, shows an aerial photograph of the Property.



*Figure 15 - Aerial Photograph of the Property*

**4.5 Conversation with People Familiar with the Site**

**4.5.1 Arizona Public Service (APS)**

APS indicated they provide electrical power to the Property and the general vicinity. Based on GTI's conversations, they stated they have replaced all the PCBs in their electrical transformers with mineral oil and thus do not have any PCB related environmental issues.



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**4.5.2 Ms. Mari Flynn**

GTI spoke with Ms. Mari Flynn, Director of Entitlements, with **Ashton Woods - Phoenix Division (Client)**. Ms. Flynn provided authorization for this Phase I ESA and she was not aware of any environmental issues at the Property.

**4.6 Data Failure**

Data failure is the inability to identify the earlier of the property's first use or to 1940 through the review of the reasonably ascertainable and likely to be useful standard historical sources. No data failure was encountered during this Phase I Environmental Site Assessment (ESA) as it was native desert land in the earliest available areal photographs from 1949.

**4.7 Impact on Purchase Price**

The all appropriate inquiries' final rule requires the prospective property owner consider whether or not the difference in purchase price and fair market value is due to the presence of releases or threatened releases of hazardous substances. GTI was not provided with any information as to the purchase price of the property or fair market value. GTI does not believe the Property has any environmental concerns which would reduce the value of the property.

**5.0 ENVIRONMENTAL LIENS, SPECIALIZED KNOWLEDGE OR EXPERIENCE**

The ASTM Standards on Environmental Site Assessments for Commercial Real Estate, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, E1527-13 (approved September 1, 2013), requires that the user provide information regarding environmental liens, specialized knowledge, or experience, as follows:

Users must take into account their specialized knowledge to identify conditions indicative of releases or threatened releases. If the user has any specialized knowledge or experience that is material to recognized environmental conditions in connection with the property, the user should communicate any information based on such specialized knowledge or experience to the environmental professional. The user should do so before the environmental professional does the site reconnaissance. According to the ASTM document, the term User is defined as follows:

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**User:** The party seeking to perform an environmental site assessment of the property. A user may include, without limitation, a purchaser of a property, a potential tenant of property, an owner of property, a lender, or a property manager

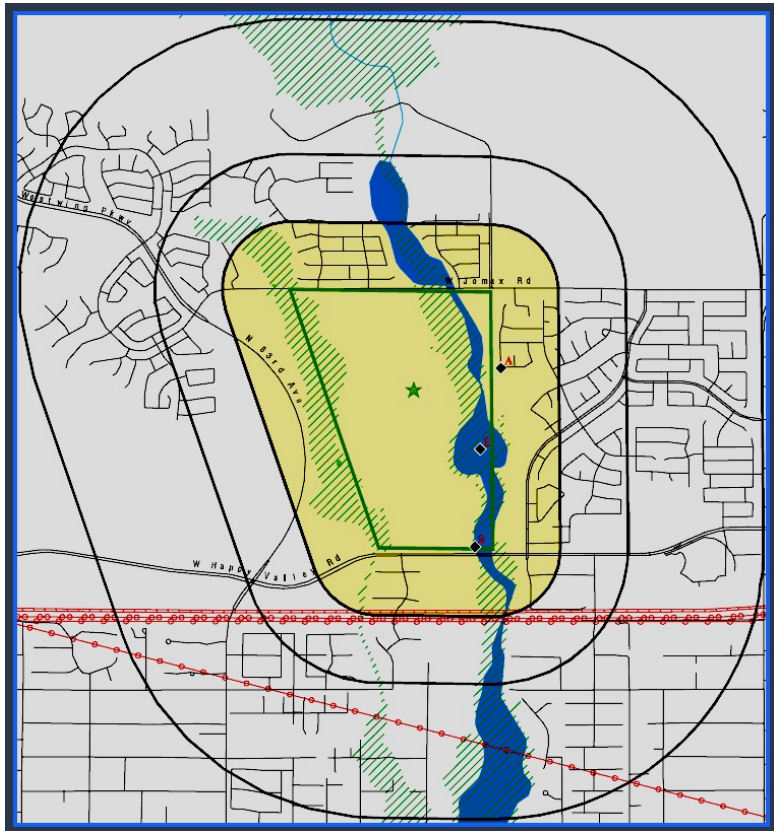
No information regarding Voluntary Environmental Mitigation Use Restriction (VEMUR), Declaration of Environmental Use Restriction (DEUR), or environmental liens of any kind, or specialized knowledge or experience was provided to GTI by the owner.

**6.0 RESULTS OF GOVERNMENT AGENCY/DOCUMENTS REVIEW**

**6.1 Regulatory Listed Facilities**

A review of State and Federal regulatory agencies was performed by a regulatory information retrieval service. They did so to determine if the Property, or nearby properties are listed as a record of actual or potential environmental impact, or are under investigation for any environmental contamination. A map showing the Property and the areas identified in the regulatory search is shown on Figure 16.

A listing of all the databases reviewed is shown on the following pages. The full governmental database search is included in the appendix.



*Figure 16 - Regulatory Database Result Map*

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## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<i><b>Federal NPL site list</b></i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<i><b>Federal Delisted NPL site list</b></i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i><b>Federal CERCLIS list</b></i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i><b>Federal CERCLIS NFRAP site list</b></i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i><b>Federal RCRA CORRACTS facilities list</b></i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i><b>Federal RCRA non-CORRACTS TSD facilities list</b></i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i><b>Federal RCRA generators list</b></i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
<i><b>Federal institutional controls / engineering controls registries</b></i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<i><b>Federal ERNS list</b></i>								
ERNS	0.001		0	NR	NR	NR	NR	0
<i><b>State- and tribal - equivalent NPL</b></i>								
AZ NPL	1.000		0	0	0	0	NR	0
AZ WQARF	1.000		0	0	0	0	NR	0
<i><b>State- and tribal - equivalent CERCLIS</b></i>								
SPL	1.000		0	0	0	0	NR	0
SHWS	1.000		0	0	0	0	NR	0
<i><b>State and tribal landfill and/or solid waste disposal site lists</b></i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i><b>State and tribal leaking storage tank lists</b></i>								
LUST	0.500		0	0	0	NR	NR	0



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INDIAN LUST	0.500		0	0	0	NR	NR	0
<i>State and tribal registered storage tank lists</i>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<i>State and tribal institutional control / engineering control registries</i>								
AZURITE	0.500		0	0	0	NR	NR	0
AUL	0.500		0	0	0	NR	NR	0
<i>State and tribal voluntary cleanup sites</i>								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<i>State and tribal Brownfields sites</i>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>ADDITIONAL ENVIRONMENTAL RECORDS</b>								
<i>Local Brownfield lists</i>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Landfill / Solid Waste Disposal Sites</i>								
SWTIRE	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
<i>Local Land Records</i>								
LIENS 2	0.001		0	NR	NR	NR	NR	0
<i>Records of Emergency Release Reports</i>								
HMIRS	0.001		0	NR	NR	NR	NR	0
SPILLS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
<i>Other Ascertainable Records</i>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0

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### MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		2	0	NR	NR	NR	2
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	0.001		0	NR	NR	NR	NR	0
Aquifer	0.001		0	NR	NR	NR	NR	0
AZ DOD	0.500		0	0	0	NR	NR	0
Dry Wells	0.001		0	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMAP	0.001		1	NR	NR	NR	NR	1
Enforcement	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
MANIFEST	0.250		0	0	NR	NR	NR	0
SPDES	0.001		0	NR	NR	NR	NR	0
VAPOR	0.500		0	0	0	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
WWFAC	0.500		0	0	0	NR	NR	0
MINES MRDS	0.001		1	NR	NR	NR	NR	1

#### EDR HIGH RISK HISTORICAL RECORDS

##### EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
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### MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
<b>EDR RECOVERED GOVERNMENT ARCHIVES</b>								
<i>Exclusive Recovered Govt. Archives</i>								
RGA HWS	0.001		0	NR	NR	NR	NR	0
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals -		0	4	0	0	0	0	4

**NOTES:**

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

During the course of this Phase I Environmental Site Assessment (ESA), the Property **was** identified in the governmental database search. In addition, there were **three (3)** other governmental listings identified within the minimum ASTM recommended search radiuses. These listings are discussed individually below:

- The listing at the Property has been identified as Map ID No. "1". The listing is for the **79<sup>th</sup> Avenue Pit** which was a Sand and Gravel Mining Operation. The operation was rather small and since it has no violations, it does not result in a REC to the Property.
- The second listing near the southern portion of the Property has been identified as Map ID No. "2" and it is for the **Happy Valley Road Detention Basin**. This was a construction project permit with no violations; therefore, it does not constitute as a REC to the Property.



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- The third and fourth listings have been identified as a cluster of two (2) listings registered to the **Arizona Crushers Inc.**, located approximately 187± feet east to northeast of the Property. This listing is also related to the mining operations in the area and were involved with the crushing of the Sand and Gravel being mined. As there are no violations associated with these listings, they do not pose a REC to the Property.

This Phase I Environmental Site Assessment (ESA) concluded the following:

- **Current Recognized Environmental Conditions (REC)**

*A 'Recognized Environmental Condition (REC)' as defined in the ASTM Standard, is the presence, or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De-minimis conditions are not recognized environmental conditions." This assessment has revealed **NO** evidence of Recognized Environmental Conditions (REC) at the Property.*

- **Historical Recognized Environmental Conditions (HREC)**

*A 'Historical REC (HREC)' as defined in the ASTM Standard, is a past release of any hazardous substance and/or petroleum product that has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria. No known past releases were associated with the Property. This assessment has revealed **NO** evidence of Historical Recognized Environmental Conditions (HREC) at the Property.*

- **Controlled Recognized Environmental Conditions (CREC)**

*A 'Controlled REC (CREC)' as defined in the ASTM Standard, is a REC resulting from a past release of hazardous substances and/or petroleum products in which the regulatory agency has allowed contamination to remain in place at the property which is subject to the implementation of required controls and/or restrictive use. This assessment has revealed **NO** evidence of Controlled Recognized Environmental Conditions (CREC) at the Property.*

Based on GTI's site reconnaissance, review of governmental databases, and historical aerial photographic review, GTI does not believe any past or present activities at the Property have posed an environmental threat or REC to the Property.

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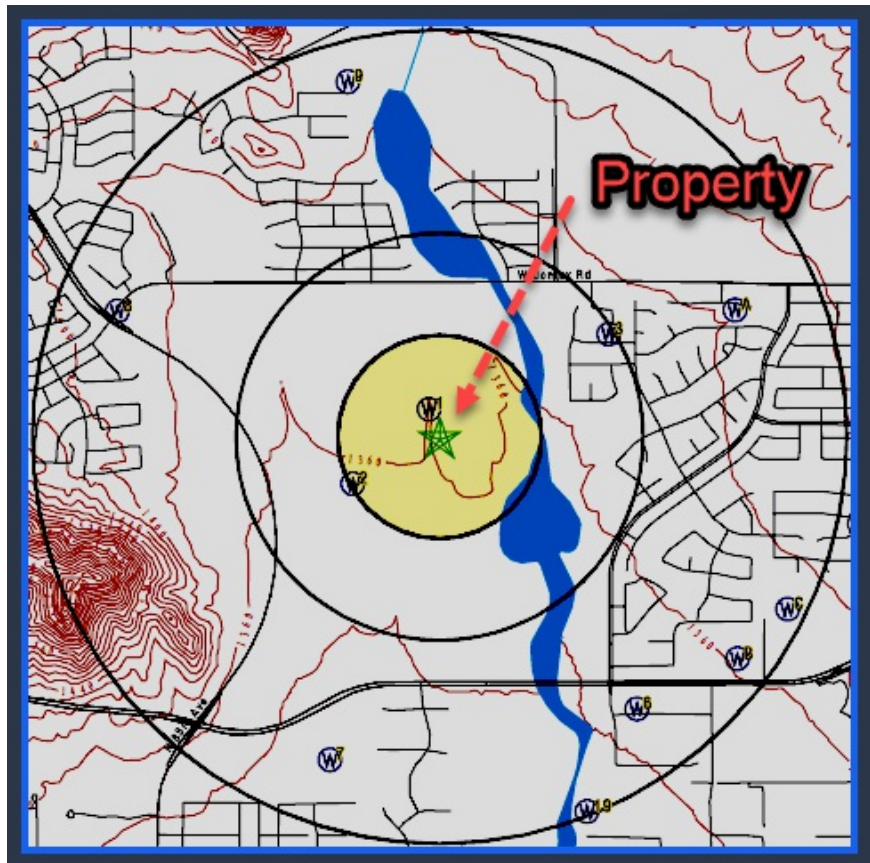


## 6.2 Water Well Information

The Water Well Information was provided by the United States Geological Survey (USGS), the Federal FRDS Public Water Supply System, and the state well database. The database contains information for over 1,000,000 wells and other sources of groundwater, which these agencies have studied, used, or otherwise had reason to document through the course of research.

The Regulatory Listed Facilities search reported **nineteen (19)** water wells located within a one (1) mile radius of the Property, with one of the wells (W1) located within the 267+ Acres encompassing the Property. A map showing the Property and wells in the general vicinity is shown on Figure 17.

None of the wells identified on the Property or in the general vicinity of the Property have any citations or any other environmental issues. GTI does not believe any of these wells result in a REC to the Property.



*Figure 17 - Map of FRDS Water Wells*

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## **7.0 CONCLUSIONS AND RECOMMENDATIONS**

GTI has performed a Phase I Environmental Site Assessment (ESA), in general conformance with the scope and limitations of ASTM Practice E-1527-13, for the 94+ acres at **ALORAVITA SOUTH - PARCELS 3 - 8**, Located off of the Northeast Corner of West Happy Valley Road and North 83<sup>rd</sup> Avenue, Peoria, Maricopa County, Arizona, 85383. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report.

**This Environmental Site Assessment (ESA) has revealed NO evidence of Recognized Environmental Conditions (REC), Historical Recognized Environmental Conditions (HREC) or Controlled Recognized Environmental Conditions (CREC) in connection with the Property.**

Based on GTI's site reconnaissance, governmental database records review, and conversations with people familiar with the Property, GTI does not believe any additional environmental testing or studies are needed at the Property at this time.

## **8.0 LIMITATIONS**

GTI's professional services have been performed using that degree and skill ordinarily exercised, under similar circumstances, by reputable geotechnical engineers practicing in this or similar localities. Neither GTI nor their agents or employees shall be jointly, severally, or individually liable to the owner in excess of the compensation to be paid pursuant to this agreement, by any reason of any act or omission, including breach of contract or negligence not amounting to a willful or intentional wrong. No other warranty, expressed or implied, is made. This environmental site assessment report was prepared in accordance with the generally accepted standard of practice in Arizona at the time the report was written.

This report is exclusively for the use and benefit of **Ashton Woods - Phoenix Division (Client) and Taylor Morrison / Arizona, Inc. & Lennar Arizona Inc. & Arizona State Land Department** and may not be relied upon by other persons or entities without written permission from GTI. The scope of services performed in execution of this evaluation may not be appropriate to satisfy the needs of other users, and the use or re-use of this document or the findings, conclusions, or recommendations is at the risk of said users.

The findings and opinions are relevant to the dates of GTI's site work and should not be relied on to represent conditions at substantially later dates. ASTM Practice E1527-13, Section 4.6 states the following:



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*This Phase I Environmental Site Assessment (ESA) is valid for a period of only six (6) months from the date of the report. After that time, the Phase I Report will have to be updated.*

The opinions included herein are based on information obtained during the study and GTI's experience. If additional information becomes available which might impact GTI's environmental conclusions, GTI requests the opportunity to review the information, reassess the potential concerns, and modify GTI's opinion, if warranted. If this assessment included a review of reports prepared by other consultants, it must be recognized GTI has no responsibility for the accuracy of information contained therein. Although this assessment has attempted to identify the potential for contamination of the Property, potential sources of contamination may have escaped detection due to:

- (1) the limited scope of this assessment,*
- (2) the inaccuracy of public records, and*
- (3) the presence of undetected and unreported environmental accidents.*

## **9.0 QUALIFICATIONS OF INVESTIGATORS**

The field portion of this Phase I Environmental Site Assessment (ESA) was conducted by Dan Crawley, GTI Sr. Project Manager. The report was prepared by Randy Smith, P.E., Environmental & Geotechnical Department Manager, and the report was reviewed by Dr. Peter Fleming, P.E., President of GTI. A brief summary of their qualifications follows:

### **9.1 Dan Crawley - Sr. Project Manager**

Mr. Crawley is a Sr. Project Manager for Geotechnical Testing & Inspections (GTI). Mr. Crawley has conducted numerous Phase I Environmental Site Assessment (ESA) studies. In addition, Mr. Crawley has completed many geotechnical subsurface exploration reports throughout Arizona.

### **9.2 Randy Smith, P.E. Environmental Department Manager**

Mr. Smith is the Geotechnical and Environmental Department Manager for Geotechnical Testing & Inspections (GTI). Mr. Smith holds a degree in geological engineering and is a registered civil engineer in Arizona. Mr. Smith has performed hundreds of Phase I Environmental Site Assessment studies as well as Phase II Site Characterization Studies over the last 20 years. Projects include master planned communities, commercial development, multifamily and raw land. In addition, Mr. Smith is an AHERA certified building inspector

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and has OSHA 40 hour Hazardous Materials training. He has practiced geotechnical engineering in Arizona for over 24 years. Projects include master planned communities, residential subdivisions, parking structures, multifamily, warehouse, office, retail, bridges, airport , solar power facilities, electrical substation, retaining walls, cut and fill slopes, geophysical reports, percolation, and highway. He has provided services for foundations including spread footing foundations, post-tensioned foundations, drilled shaft, and helical pier. He is American Concrete Institute (ACI) certified in Field and Concrete Lab I and Arizona Technical Testing Institute (ATTI) Laboratory and Field (Soil, Aggregate, and Asphaltic Concrete).

**9.3 Dr. Peter Fleming, P.E. - President**

Dr. Fleming is President of Geotechnical Testing & Inspections (GTI) and is responsible for all the technical and administrative aspects of the company. He holds a Master's degree and Ph.D., in civil engineering with a special focus on environmental and geotechnical engineering. Dr. Fleming has over 39 years of professional experience focused in the areas of geotechnical and environmental engineering related projects. He is a registered professional engineer in Arizona and sixteen other states across the United States. He is fully EPA AHERA-certified to direct all asbestos identification, evaluation and abatement activities. He is also an EPA-approved radon mitigator, as well as a California Environmental Site Assessor. Dr. Fleming is responsible for the firm's Environmental Services Division, including training and technical consultation. Dr. Fleming's expertise and experience in these areas have been utilized in soil and groundwater remediation, groundwater modeling and tracking of contaminant migration, Environmental Site Assessments, and underground storage tank evaluations and removal. Dr. Fleming provided review of several thousand Phase I Environmental Site Assessments, several hundred Phase II Site characterization studies, including soil gas surveys, and numerous Phase III Remediation studies. In addition, Dr. Fleming has completed several thousand geotechnical studies nationally and internationally, involving high-rise structures, dams, lakes, interstate highways, bridges, airports, resorts, marinas, numerous retaining structures, levees, and shoring systems, geophysical explorations, synthetic liners, vibrations studies, in-situ testing, etc. Many of the projects involved evaluation of shallow and numerous types of deep foundation systems, slope stability analysis, retaining walls, settlement and seepage calculations, etc. Dr. Fleming also provided expert testimony on numerous geotechnical and environmental issues. Dr. Fleming is nationally known for his innovative and cost saving solutions to complicated geotechnical problems. Dr. Fleming is a Certified Microbial

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Consultant from the American Indoor Air Quality Council. Dr. Fleming is a Level I and Level II Mold Inspector as well as a Certified Mold Instructor with the Mold Institute.

**10.0 LIST OF REFERENCES**

- ADEQ DRASTIC maps for Maricopa County
- ADEQ Pesticides Division
- EDR Environmental Data Resources, Inc. - December 26, 2019
- ADEQ Dry Well Registration Data Base - December 26, 2019
- Directory of Arizona Active Landfills - ADEQ, December 26, 2019
- Directory of Arizona Inactive Landfills - ADEQ, December 26, 2019
- Directory of Arizona Closed Solid Landfills - ADEQ, December 26, 2019
- FEMA. Flood Map - 04013C1255L (effective date: October 16, 2013)
- Maricopa County Flood Control District - Current Flood Map
- Arizona Department of Water Resources
- Standard Practice for Environmental Site Assessments - ASTM E 1527-13
- ADEQ Underground Storage Tanks Division
- USGS Maps - *Hedpeth Hills* Quadrangle 7.5 minute series - 1982, 2014
- Site Auditing-Environmental Assessment of Property-1992 Specialty Technical Publishers
- Environmental Liability and Real Property Transactions - 1989 John Wiley & Sons
- Arizona Public Service (APS)
- Google Earth - Photos Dated 1992 to 2019
- Flood Control District of Maricopa County - Photos dated 1949 to 2018
- Maricopa County Assessors Office - Photos dated 2011 to 2018
- Nearmap - September 17, 2019



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**APPENDIX**