



PIMA COUNTY

Rezoning Site Analysis Tractor Supply Company



**Parcel 222-21-041 & 222-21-024D
Catalina, Pima County, Arizona**

Prepared by:

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June 23, 2014

Executive Summary

This Site Analysis has been prepared for a proposed Tractor Supply Company at the northeast corner of Oracle Road and Lamb Drive in the unincorporated community of Catalina in Pima County, Arizona. The subject properties of this site analysis are defined as parcels 222-21-0410 and 222-21-024D. The site is currently vacant, with current CB-1 zoning on parcel 222-21-0410 and GR-1 zoning on parcel 222-21-024D. The properties are proposed to be rezoned to CB-2 to accommodate the outdoor display areas required for Tractor Supply Company retail stores.

The proposed development consists of a 21,702-sf Tractor Supply Company store with related site improvements including a 1,250-sf hay barn, site landscaping, paved parking and concrete hardscape, utilities and drainage infrastructure. Tractor Supply Company is the largest retail farm and ranch store chain in the United States. The company operates more than 1,085 retail stores in 44 states, employs more than 15,000 team members and is headquartered in Brentwood, Tennessee. Today Tractor Supply is a leading edge retailer with revenues of approximately \$4 billion. Stores supply the unique products to support their customers' rural lifestyle, from welders and generators to animal care products and men and women's work wear. They also offer pet supplies, animal feed, power tools, riding mowers, lawn and garden products and more.

Surrounding land use generally includes commercial development along the Oracle Road corridor with residential development to the east. This section of Oracle Road is covered by the Gateway Overlay Zone. The Comprehensive Plan designation for surrounding properties along Oracle Road is classified as activity centers Multi-Functional Corridor (MFC).

Site topography is generally mild, trending to the south with an average cross-slope of 5%. Existing vegetation is mostly Prickly Pear and Cholla cacti with scattered Mesquite and Palo Verde trees. Natural drainage ways generally trend to the south in two natural channels. Off-site drainage from Catalina Plaza to the north enters the property through a storm drain along the north property line. Runoff from less frequent, intense rainfall enters the site as overflow from the retention basin for Catalina Plaza. The site layout is proposed to complement existing drainage conditions as much as practical; the proposed building is located as far west as possible to allow for continuity of existing drainage infrastructure within Catalina Plaza.

There are no cultural or biological resources on the site that preclude development of the property as a commercial retail facility. Views and vistas from adjacent properties will not be blocked or impaired by development of the site. The majority of views in the area are of the Santa Catalina Mountains and Mount Lemmon to the east. There are no adjacent properties to the west, beyond Oracle Road, that will experience degraded views or vistas.

Proposed access to the site will be from Oracle Road (currently being widening to a six-lane divided roadway), through a shared driveway with Catalina Plaza to the north. The geometry of the proposed shared driveway will be adequate to serve as the main entrance for Tractor Supply Company and secondary access for Catalina Plaza. The shared driveway will help with access control along Oracle Road by reducing the number of driveways in close proximity.

Water and sewer service is available to the project from the Lago Del Water Company and the Pima County Regional Wastewater Reclamation Department. Both water and sewer utilities have adequate capacity to serve this project.

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Part I - Site Inventory

The site inventory serves to identify and describe existing characteristics and conditions of the site. It identifies both development constraints and development opportunities of the site prior to the actual site design process.

A. Existing Land Uses

1. Location and Regional Context

The two subject properties of this Site Analysis and rezoning application include parcels 222-21-0410 and 222-21-024D, located within Section 9, Township 11 South, Range 14 East, in the unincorporated area of Catalina, Pima County, Arizona. The site is located at the northeast corner of Oracle Road and Lamb Drive, in the northwest quadrant of the Tucson area. Interstate 10 is approximately 15 miles to the west. Please Refer to [Exhibit I-A.1: Location & Regional Context](#).

2. Existing Land Uses

- a. The site is currently vacant, with current CB-1 zoning on parcel 222-21-0410 and GR-1 zoning on parcel 222-21-024D.
- b. Existing easements on the site include a 10-ft gas easement and a 50-ft scenic view easement along the frontage of Oracle Road. A 30-ft ingress, egress and public utility easement is located along the southern boundary, adjacent to Lamb Drive. Lamb Drive is located completely outside of this easement, within a contiguous 30-ft easement south of the property. Please refer to [Exhibit I-A.2: Existing Easements](#).
- c. The site is located in the northwest sub-region of the Comprehensive Plan, within the activity centers Multi-Functional Corridor (MFC). The property is also located within Special Area Plan Policy S-5 Oracle Corridor / Northern Gateway (NW) [2-07].

3. Aerial Photo

Surrounding properties are shown on [Exhibit I-A.3: Aerial Photo](#).

4. Surrounding Properties

Surrounding properties within a ¼ mile of the site are shown on [Exhibit I-A.4](#).

- a. Surrounding zoning generally includes CB-1 and CB-2 zoning along Oracle Road. There is a small pocket of CMH-2 zoning immediately south and to the southeast of the site. There is GR-1 zoning east of the site and RH zoning to the west, beyond Oracle Road. This section of Oracle Road is covered by the Gateway Overlay Zone.
- b. Surrounding land use generally includes commercial development along the Oracle Road corridor with residential development to the east. Land use intensity for residential development in the vicinity is classified as low intensity urban.
- c. Surrounding development is comprised of all single story structures.
- d. Surrounding properties are mostly developed with no pending rezonings.
- e. The Comprehensive Plan designation for surrounding properties along Oracle Road is classified as activity centers Multi-Functional Corridor (MFC).



Exhibit I-A.1: Location & Regional Context

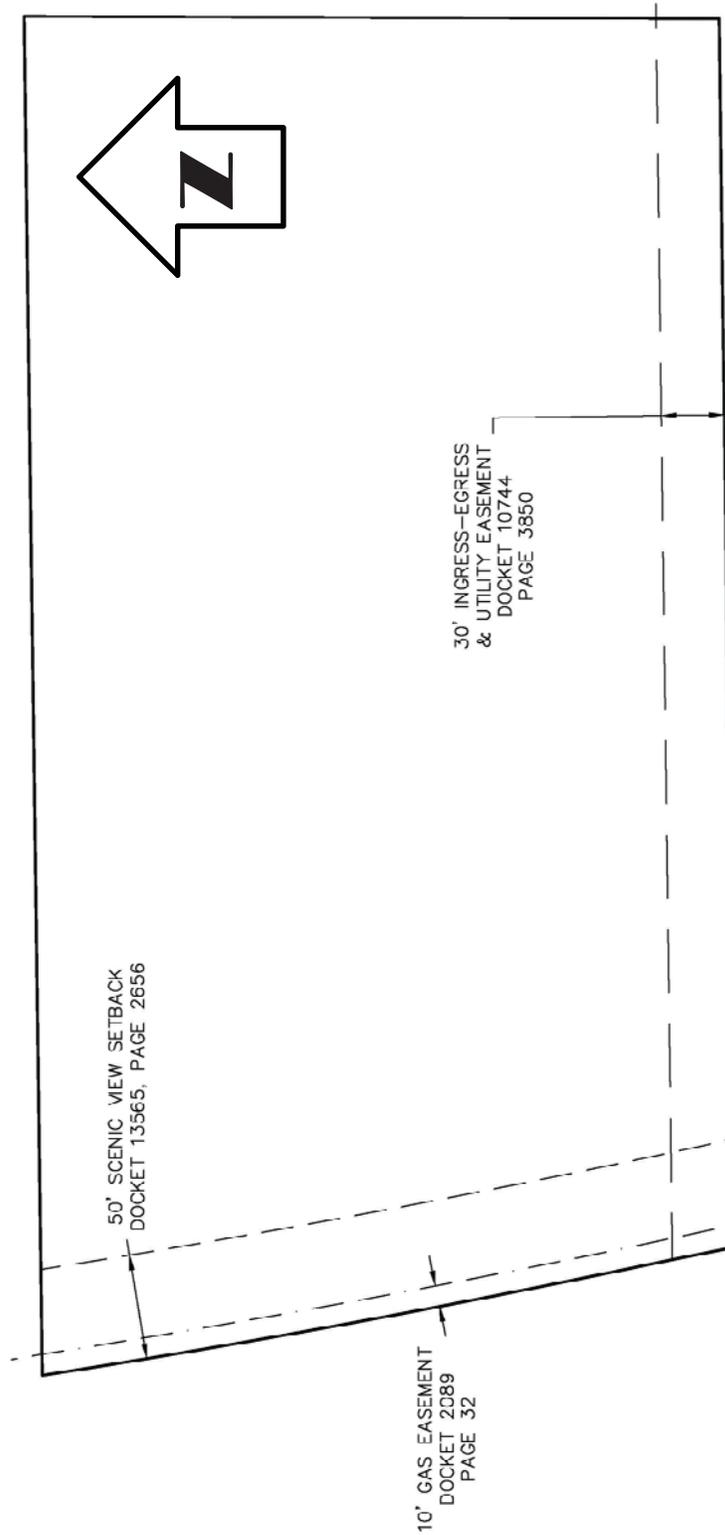


Exhibit I-A.2: Existing Easements



Exhibit I-A.3: Aerial Photo

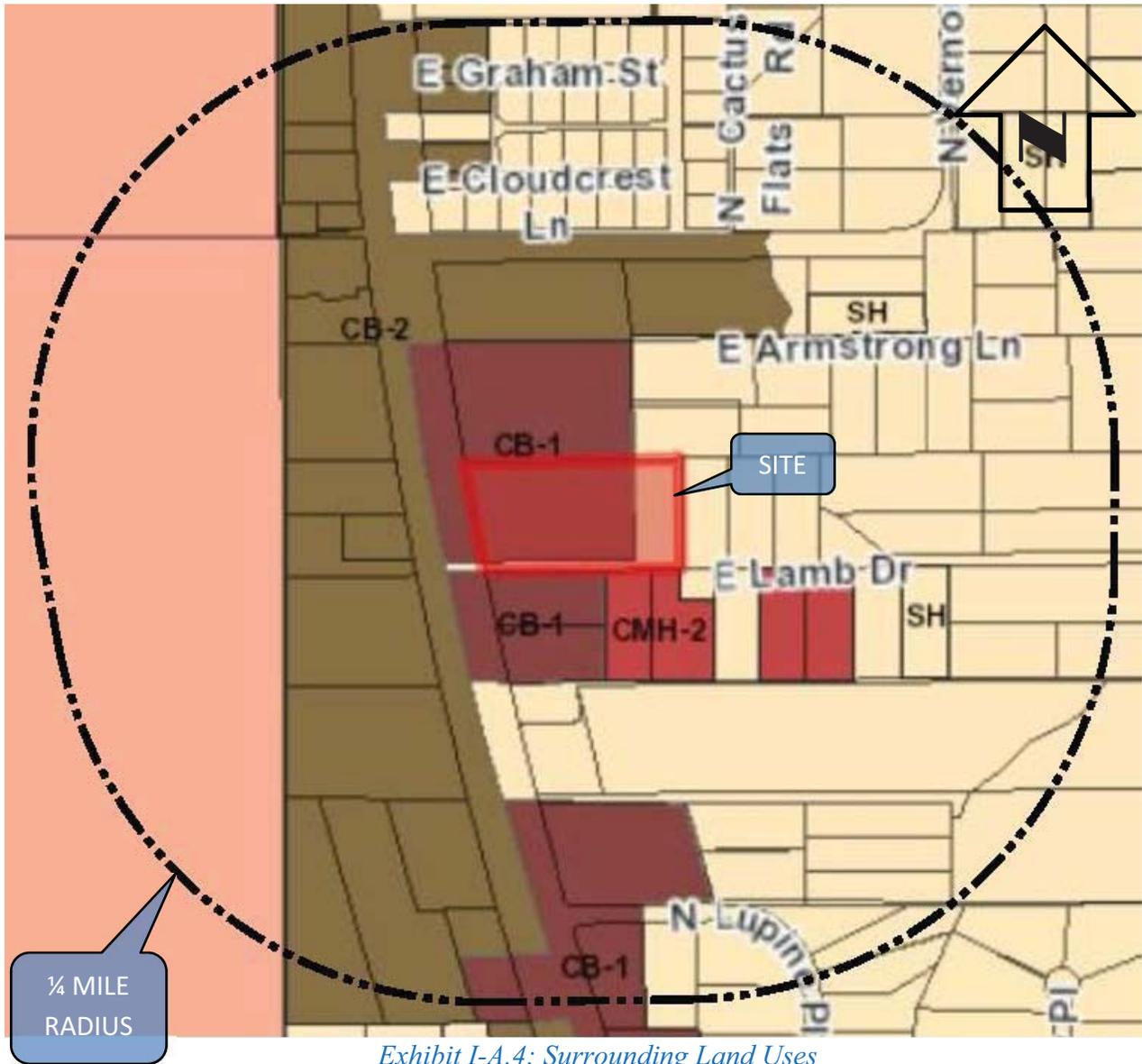


Exhibit I-A.4: Surrounding Land Uses

B. Topography & Grading

1. Topographic Characteristics

Elevations range from 3,094 along the southern boundary to 3,107 at the northwest corner of the property. Existing site topography is shown on *Exhibit I-B.1*. Existing topographic characteristics of the site are as follows:

- a. There are no restricted peaks and ridges on the site.
- b. There are no rock outcrops or talus slopes on the site.
- c. There are no slopes greater than 15% on the site.
- d. There are no significant topographic features on the site.
- e. There is no existing grading or ground disturbance on the site.

2. Pre-Development Average Cross Slope

The predevelopment average cross slope of the total site is 5% based on the following calculation:

$$\begin{aligned}
 ACS &= (I \times L \times 0.0023) / A \\
 &= (1 \times 9,590 \times 0.0023) / 4.68 \\
 &= 4.7 (5\%)
 \end{aligned}$$

$$\begin{aligned}
 I &= \text{contour interval (1')} \\
 L &= \text{combined length of contours (ft)} \\
 A &= \text{area (acres)}
 \end{aligned}$$

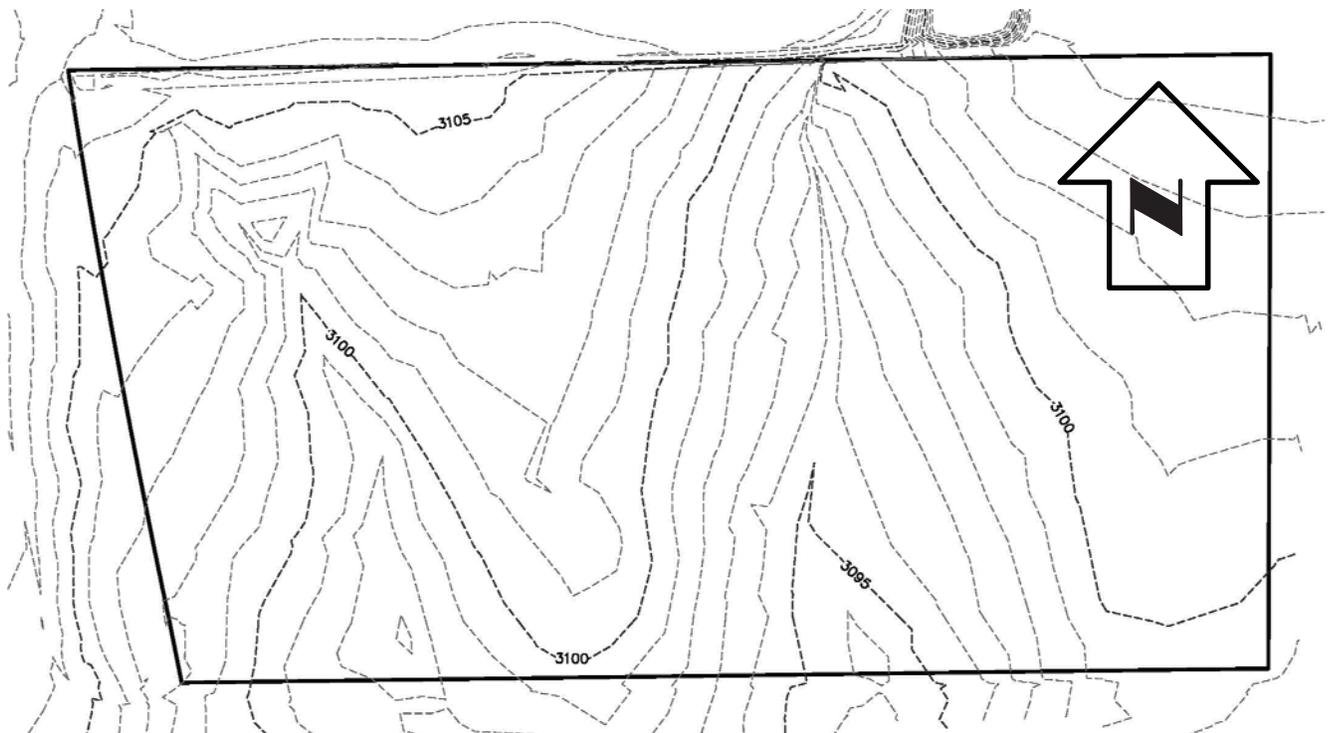


Exhibit I-B.1: Existing Topography

C. Hydrology

1. Off-Site Watersheds

The site is impacted by off-site runoff from the Catalina Plaza Shopping Center to the north, as shown on [Exhibit I-C.1](#). Off-site runoff is generally comprised of:

- Discharge from a 48-in storm drain along the north property line.
- Emergency overflow from a retention basin at the northeast corner of the site.
- Curb-cuts along the paved road south of the Catalina Plaza Shopping Center.

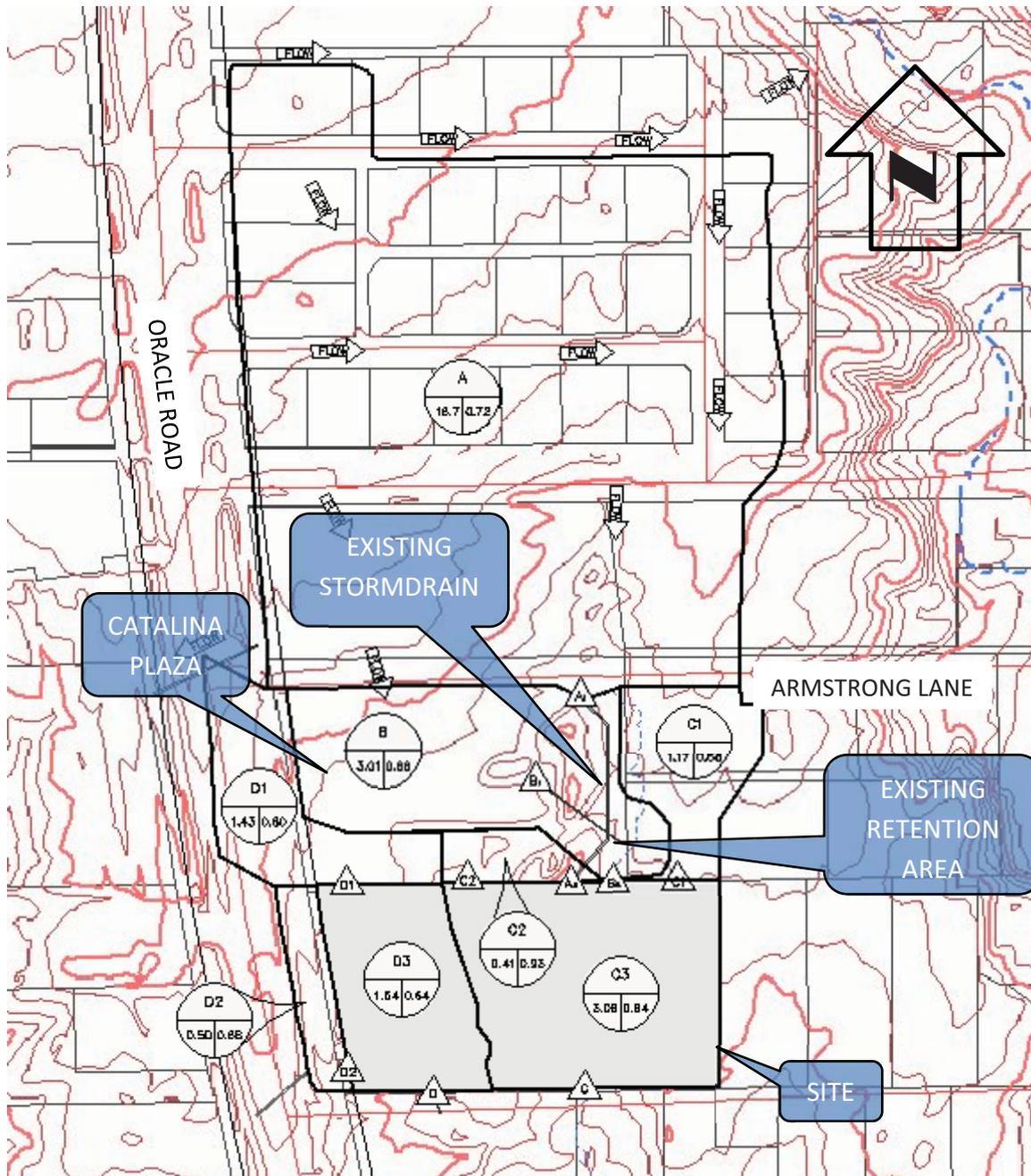


Exhibit I-C.1: Off-Site Watersheds

2. Off-Site Natural or Man-Made Features

Most off-site runoff is concentrated in the 48-in diameter storm drain that discharges along the north boundary of the site. The contributing drainage area to this storm drain is 16.7-acres and the estimated 100-year peak flow is 89.2-cfs. The inlet to the storm drain has a 24-in orifice plate that drastically restricts flow capacity. We understand that this orifice will be removed at the direction of the Pima County Regional Flood Control District.

The existing retention basin has one incoming storm drain from the parking lot of Catalina Plaza. The basin has a 6-in gravity bleed-off pipe that discharges to the 48-in storm drain. Overflows from the retention basin enter the site along the north property line in a sheet flow condition. The estimated 100-year peak overflow from the retention basin is 15.8-cfs

3. Upstream Off-Site Watersheds with 100-Year Discharges Greater than 100-cfs

There are no upstream off-site watersheds with 100-year discharges greater than 100-cfs.

4. On-Site Hydrology

On-site hydrology is presented in *Exhibit I-C.4* Characteristics of on-site hydrology generally include:

- a. Peak 100-year discharges in the watercourse downstream from the existing 48-in storm drain cross the 100-cfs threshold within the boundary of the property. This watercourse is not designated as a FEMA regulatory floodplain.
- b. There are no sheet flooding areas on-site.
- c. There are no federally mapped floodways or floodplains on-site.
- d. The estimated 100-year peak discharge in the watercourse downstream from the existing storm drain is approximately 111.9-cfs where it exits the property.
- e. There are no regulated riparian habitats on-site.
- f. There are no existing drainage improvements on-site.
- g. There are no water bodies or perennial surface water on-site.
- h. There are no erosion hazard setbacks on-site.

5. Existing Drainage Conditions along the Downstream Property Boundary

Existing drainage conditions along the downstream property boundary include two natural channels that converge immediately downstream from Lamb Drive. There are no drainage structures to convey runoff beneath Lamb Drive; runoff from the two natural channels flow over Lamb Drive in unpaved dip sections.

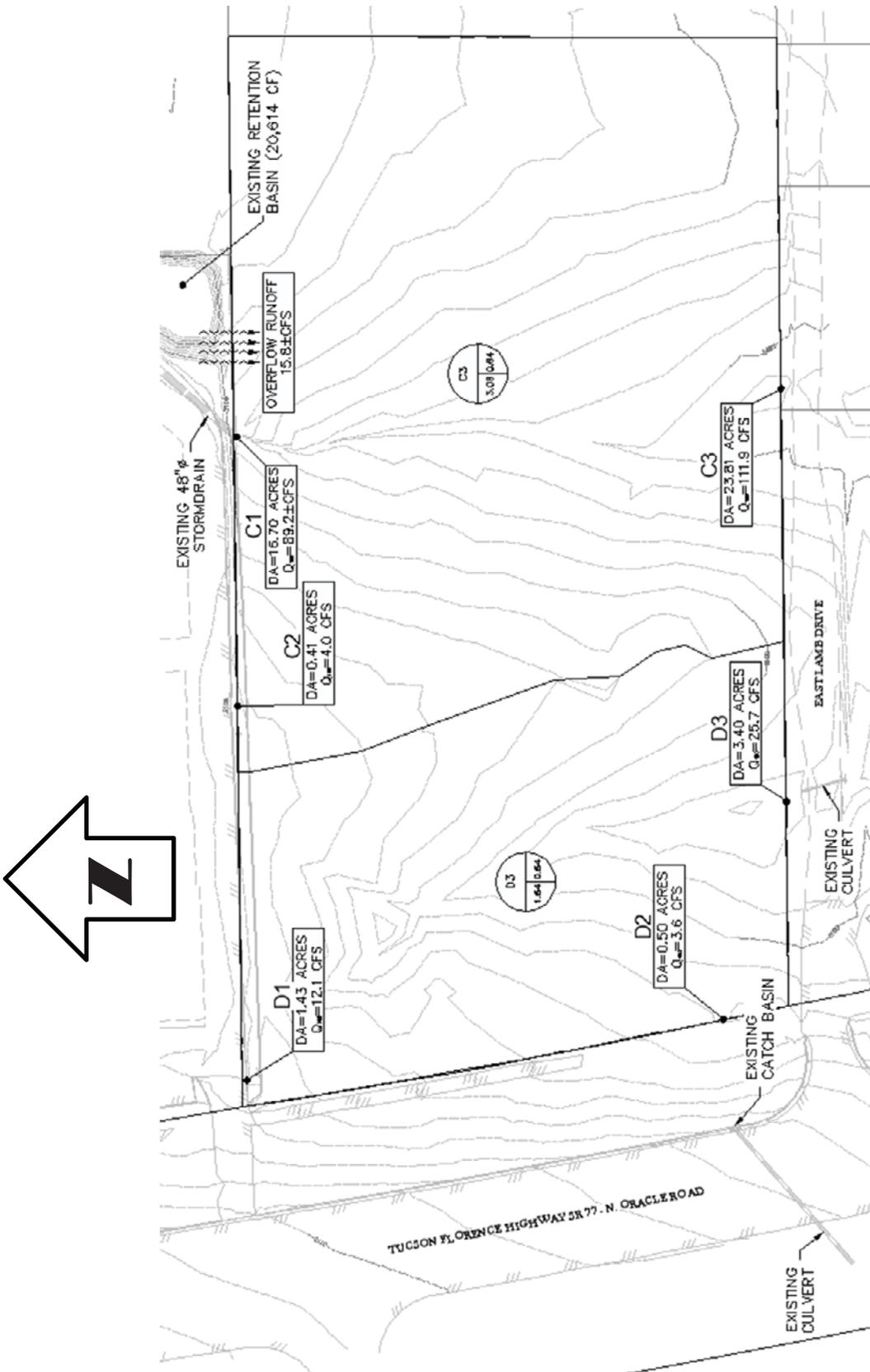


Exhibit I-C.4: On-Site Hydrology

D. Biological Resources

A Biological Impact Report was prepared for this project by Darling Geomatics. A copy of this report is included in Attachment B.

1. Conservation Land System (CLS)

The site is not located within the CLS.

2. Critical Landscape Connections (CLC)

There are no CLCs within or near the site.

3. Pima Pineapple Cactus Priority Conservation Area (PCA)

The site is not located within this PCA.

4. Needle-Spined Pineapple Cactus PCA

The site is not located within this PCA.

5. Cactus Ferruginous Pygmy-Owl & Western Burrowing Owl PCAs

The site is not located within either of these PCAs.

6. Arizona Game & Fish Department Heritage Data Management System

There are no special status species within or in close proximity to the site.

7. Saguaros & Ironwood Trees

There are not Saguaros or Ironwood trees on the site.

8. Habitat Protection or Community Open Space

The site is not a Habitat Protection or Community Open Space priority acquisition.

9. Especially Important Vegetation

There is no vegetation on-site that is especially important for scenic value, screening and/or buffering, and soil stabilization.

10. Vegetative Communities

There are no established vegetative communities on the site.

E. Viewsheds

1. Visibility Areas

This section is not applicable since the project is not being developed under the Cluster Development Option (Section 18.09.040) of the Zoning Code.

2. Site Photos

Exhibit I-E.2 includes ground-level photos looking onto the site.



Northwest corner looking southeast



Northeast corner looking west



Southwest corner looking northeast



Southeast corner looking northwest

Exhibit I-E.2: Ground Level Photos

F. Transportation

1. Existing & Proposed Off-Site Streets

Proposed access to the site is from Oracle Road. Currently, Oracle Road is an undivided, five-lane urban-minor arterial highway maintained by the State of Arizona. According to the Pima County Major Streets and Scenic Routes Plan, Oracle Road is designated a Scenic Major Route. Oracle Road has a building setback specifically addressed in the Zoning Code, which is a 150 foot building setback from the centerline of Oracle Road per Table 18.77.030 of the zoning code. The existing and proposed right-of-way for Oracle Road is 200 feet. The most current traffic count on Oracle Road from 2005 is 26,959 ADT and the traffic capacity is 37,710 ADT.

The ADOT Capital Improvements Program is currently widening Oracle Road to a six-lane divided roadway as shown on [Exhibit I-F.1](#). The improvements to Oracle Road include an additional 12-foot travel lane in each direction, 10-foot shoulder, raised center medians and left-turn lanes, retaining walls, noise walls, traffic signal improvements, drainage improvements, a shared use path on the east side of Oracle Road, and wildlife crossing structures. Construction of the Oracle Road widening is currently underway, and is expected to be completed by 2016.

Other major roads within the two-mile concurrency area include Golder Ranch Road, Wilds Road (963 ADT, 2011), Twin Lakes Drive (1,281 ADT, 2008) and Lago Del Oro Parkway (4,373 ADT, 2011). Golder Ranch Road and Wilds Road have 13,122 ADT capacities; Twin Lakes and Lago Del Oro Parkway have 15,930 ADT capacities. Golder Ranch Road, Wilds Road, Twin Lakes Drive and Lago Del Oro Parkway all meet the Pima County right-of-way standards and are designated as “urban collectors” for the federal highway classification.

Summary Right-of-Way information, roadway characteristics and average daily trips are included in [Table I-H.1](#), [Table I-H.2](#) and [Table I-H.3](#).

2. Distances from the Site to Existing Driveways & Intersections

There are no existing driveways to the site from Oracle Road. The northwest corner of the property is immediately south of the secondary access driveway to Catalina Plaza and approximately 330-ft south of Armstrong Lane. The southwest corner of the site is immediately north of Lamb Drive.

3. Bus Routes

There are no existing or planned transit routes or stops within ½ mile of the site.



Exhibit I-F.1: Existing/Planned Off-Site Streets

<i>Street</i>	<i>Existing Right-of-Way (feet)</i>	<i>Future Right-of-Way (feet)</i>	<i>Right-of-Way Standards</i>	<i>Continuous Right-of-Way</i>
<i>Oracle Road</i>	200	200	N/A	Yes
<i>Wilds Road</i>	90	90	Yes	Yes
<i>Golder Ranch Road</i>	150	90	Yes	Yes
<i>Twin Lakes Drive</i>	150	150	Yes	Yes
<i>Lago Del Oro Parkway</i>	150	150	Yes	Yes

Table I-H.1: Rights-of-Way

<i>Street</i>	<i>Classification</i>	<i>Travel Lanes</i>	<i>Bus Route</i>	<i>Bike Route</i>	<i>Capacity (ADT)</i>	<i>Speed Limit</i>	<i>Paved</i>
<i>Oracle Road</i>	<i>Urban Minor Arterial</i>	4	No	No	37,810	45	Yes
<i>Wilds Road</i>	<i>Urban Collector</i>	2	No	No	13,122	40	Yes
<i>Golder Ranch Road</i>	<i>Urban Collector</i>	2	No	No	13,122	40	Yes
<i>Twin Lakes Drive</i>	<i>Urban Collector</i>	2	No	No	15,930	40	Yes
<i>Lago Del Oro Parkway</i>	<i>Urban Collector</i>	2	No	No	15,930	40	Yes

Table I-H.2: Roadway Characteristics

<i>Street</i>	<i>Segment</i>	<i>ADT</i>
<i>Oracle Road</i>	<i>Saddlebrook to Hawser</i>	27,710
<i>Wilds Road</i>	<i>Oracle to Lago Del Oro</i>	963
<i>Golder Ranch Road</i>	<i>Oracle to Lago Del Oro</i>	6,733
<i>Twin Lakes Drive</i>	<i>Golder Ranch to Mainsail</i>	1,281
<i>Lago Del Oro Parkway</i>	<i>Golder Ranch to County Line</i>	4,373

Table I-H.3: Average Daily Trips

G. Sewers

1. Existing Public Sewer

The Pima County Regional Wastewater Reclamation Department maintains an existing sewer collection system along Oracle Road which is adequate to serve this project. The extent of the existing sewer collection system is shown in *Exhibit I-G*.

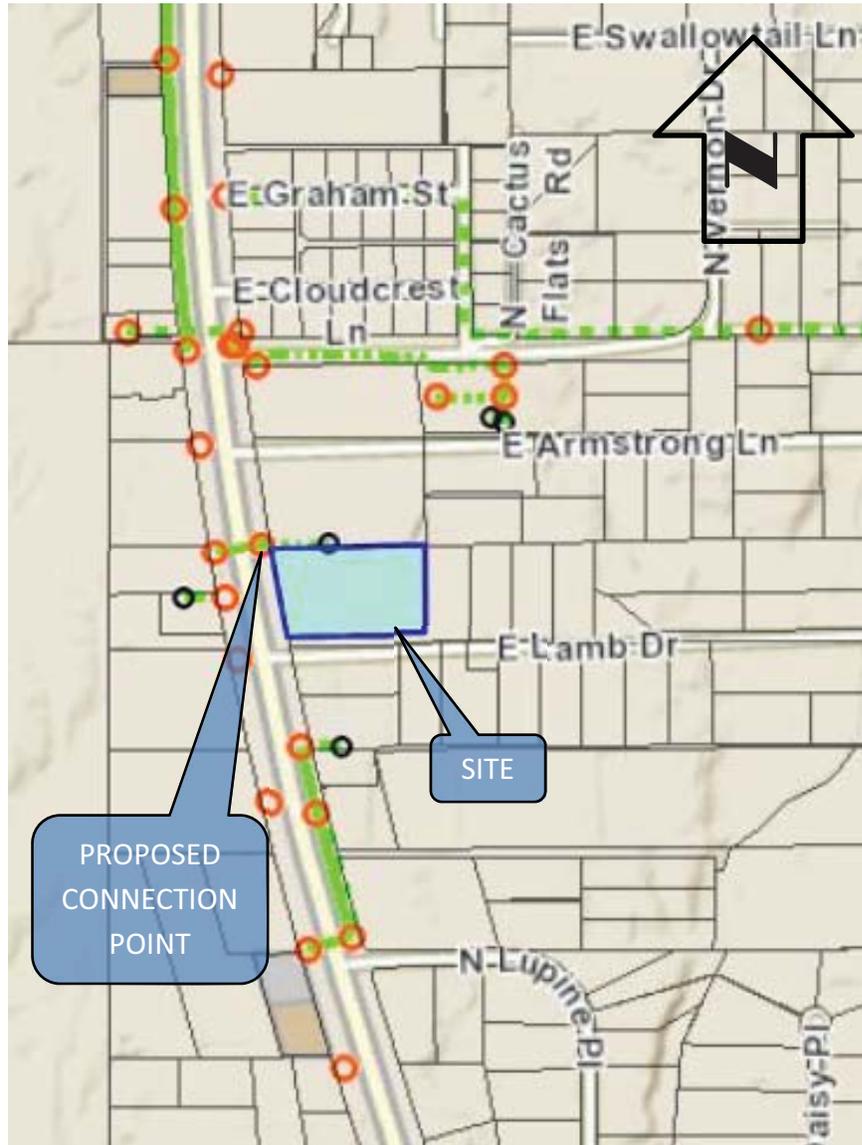


Exhibit I-G.1: Existing Public Sewer

2. Site Constraints for Gravity Sewer

There are no site constraints that preclude this project from using gravity flow to the existing sewer collection system.

H. Recreation & Trails

1. Parks, Recreation Areas & Public Trails within One Mile of the Site

The Catalina Neighborhood Recreation Center/Park is located within a mile of the site to the north. Current ADOT improvements to Oracle Road include a shared use path on the east side of the roadway, along the frontage of the project. *Exhibit I-H.1* shows these areas in relation to the site.

2. Pima Regional Trail System Master Plan (PRTSMP)

There are no trail rights-of-way as identified on the PRTSMP in the vicinity of the site.

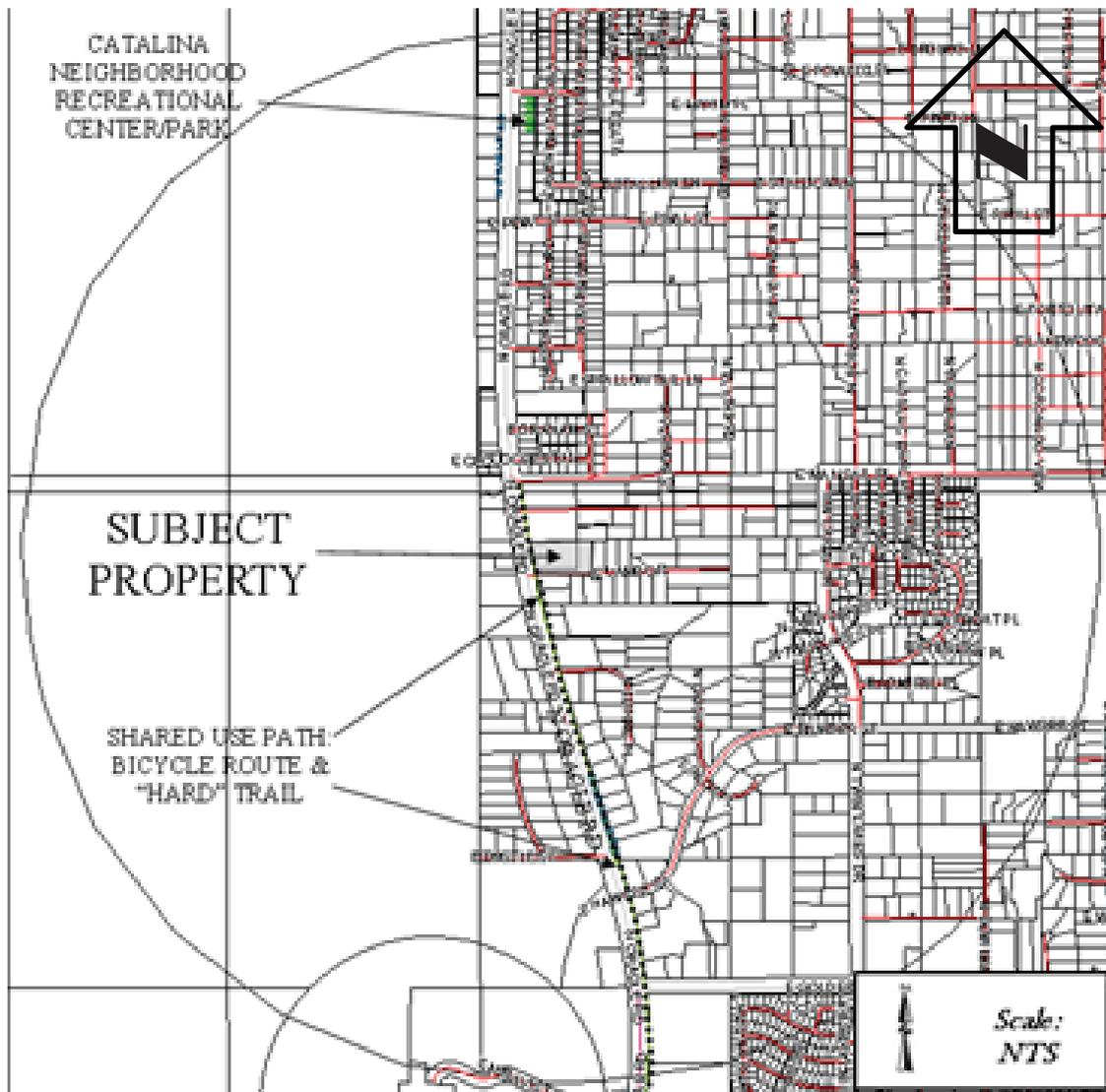


Exhibit I-H.1: Recreation & Trails

I. Cultural Resources: Archaeological & Historic Sites

1. Arizona State Museum Letter

The Pima County Archaeological Site Records Search Results from the Arizona State Museum is included in [Exhibit I-I.1](#).



Arizona State Museum

P.O. Box 210026
Tucson, AZ 85721-0026
Tel: (520) 621-6302
Fax: (520) 621-2976

PIMA COUNTY ARCHAEOLOGICAL SITE RECORDS SEARCH RESULTS*

**This report documents the results of an archaeological site-records check.
It does not constitute a cultural resources clearance.*

E-mail Request Received: 2/28/2014

Search Completed: 3/24/2014

Requester Name and Title: Tim McCann, AICP
Company: Tim McCann Consulting, LLC
Address: 229 North Redcoat Lane
City, State, Zip Code: Tucson, Arizona 85748
Phone/Fax/or E-mail: 834-4518

Project Name and/or Number	Project Description
Parcels 22221-0410 & -024D	Commercial sales property development on ~ 4.7 acres

Project Area Location: 3265 E Lamb Dr, Town of Oro Valley, Pima County, Arizona.

Legal Description: a portion of SE, SE, S26, T11S, R13E, G&SR B&M, Oro Valley, Pima County, AZ.

Search Results: A search of the archaeological site files retained at the Arizona State Museum (ASM) found that the proposed project area has not been inspected for historic properties. No historic properties are recorded in the project area; four historic properties are recorded within a mile radius, including SR 80 and Canada del Oro. Forty-one archaeological inspections were completed between 1981 and 2012 within a mile of the project area. A color orthophotograph taken in 2012 depicts undeveloped parcels with native vegetation; a couple of dirt two-track roads cross the property. Residential and commercial development surrounds the project area as well as paved roads.

Sites in Project Area: Unknown; without an intensive inspection of the ground surface in the proposed project area, it is impossible to ascertain the presence or absence of historic properties.

Recommendations: Because Pima County has jurisdiction in this project area, the county will make recommendations for the project using its own search results and it may use the ASM's search results and / or others. Should the county require additional archaeological work in this parcel, you will need to contact a qualified archaeological contractor whose name is maintained on a list posted on the ASM website at the following link: <http://www.statemuseum.arizona.edu/crservices/permits/index.shtml>.

Pursuant to *Arizona Revised Statutes* §41-865 et seq., if any human remains or funerary objects are discovered during the project work, all effort will stop within the area of the remains and Dr. Todd Pitezel, ASM assistant curator of archaeology, will be contacted immediately at (520) 621-4795.

If I can be of further assistance, please contact me at the letterhead address or the phone number or e-mail address as follows.

Sincerely,



Nancy E. Pearson
Assistant Permits Administrator
(520) 621-2096
nepearso@email.arizona.edu

This project occurs within or close to the boundary of a known cultural resource. This project requires Pima County Office of Archaeology & Historic Preservation review.



Exhibit I-I.1: Archeological Records Search Results

2. Map and Description of Archeological or Historic Sites

No archeological or historic sites have been identified on the property.

3. Field Survey Requirements or Results

An Archeological Survey was prepared for this project by Professional Archeological Services of Tucson. A copy of the survey is included in Attachment C.

J. Air Quality

This section does not apply since the project does not include industrial facilities.

K. Composite Map

The composite map shown in [Exhibit I-K.1](#) illustrates the culmination of site constraints identified during the site inventory and analysis process.

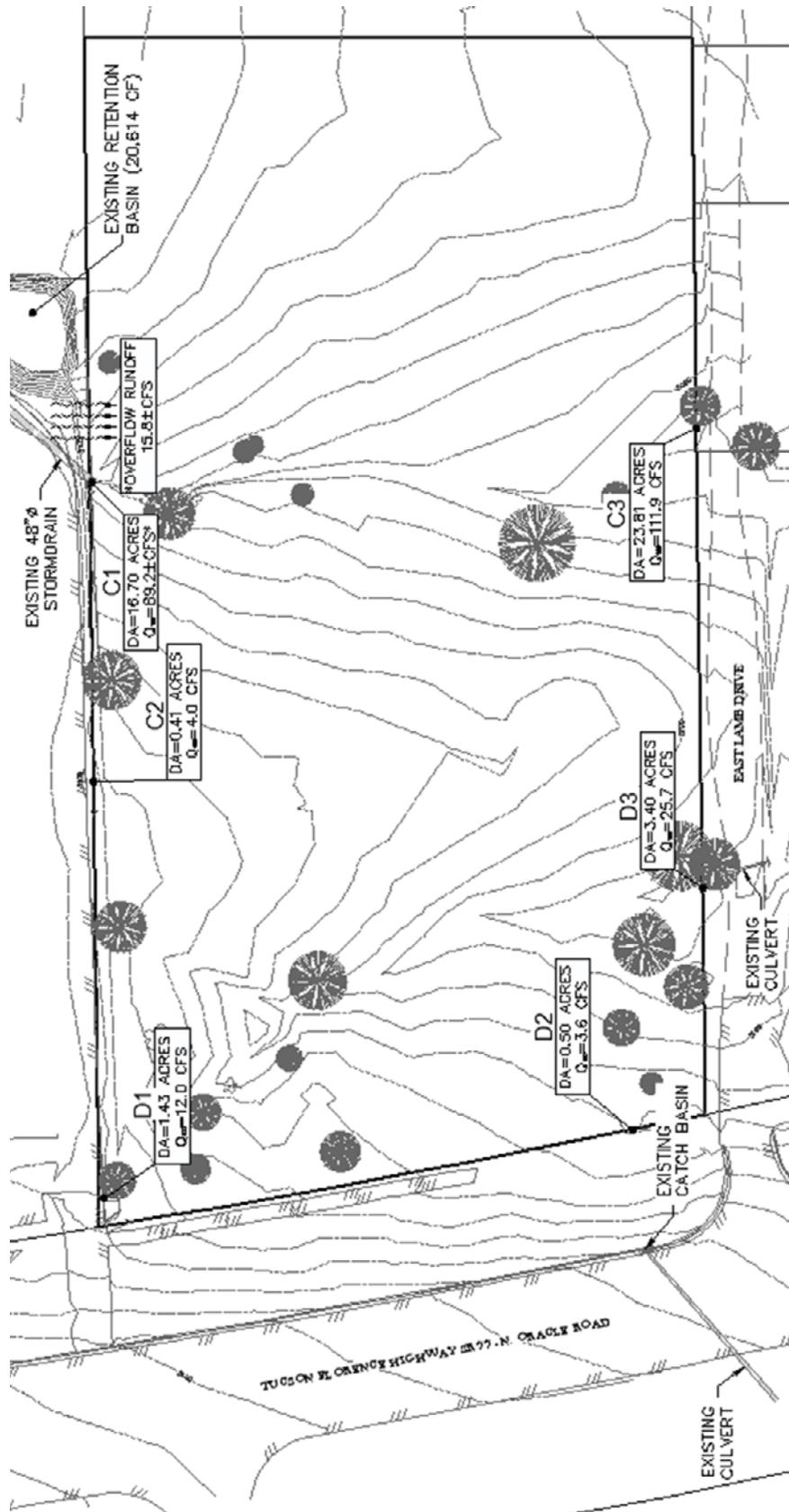


Exhibit I-K.1: Composite Map

Part II - Land Use Proposal

The land use proposal enables the developer to set forth design concepts derived from the analysis of the site's characteristics, and to present sensitive design and mitigation techniques that respond to unique site characteristics and the character of the surrounding neighborhood.

A. Project Overview

1. Requested Zoning Boundaries

This is a request to rezone 4.68± acres of property to CB-2. The land is currently zoned CB-1 on parcel 222-21-0410 and GR-1 on parcel 222-21-024D. An overview of the proposed rezoning boundary is included in *Exhibit II-A.1*.

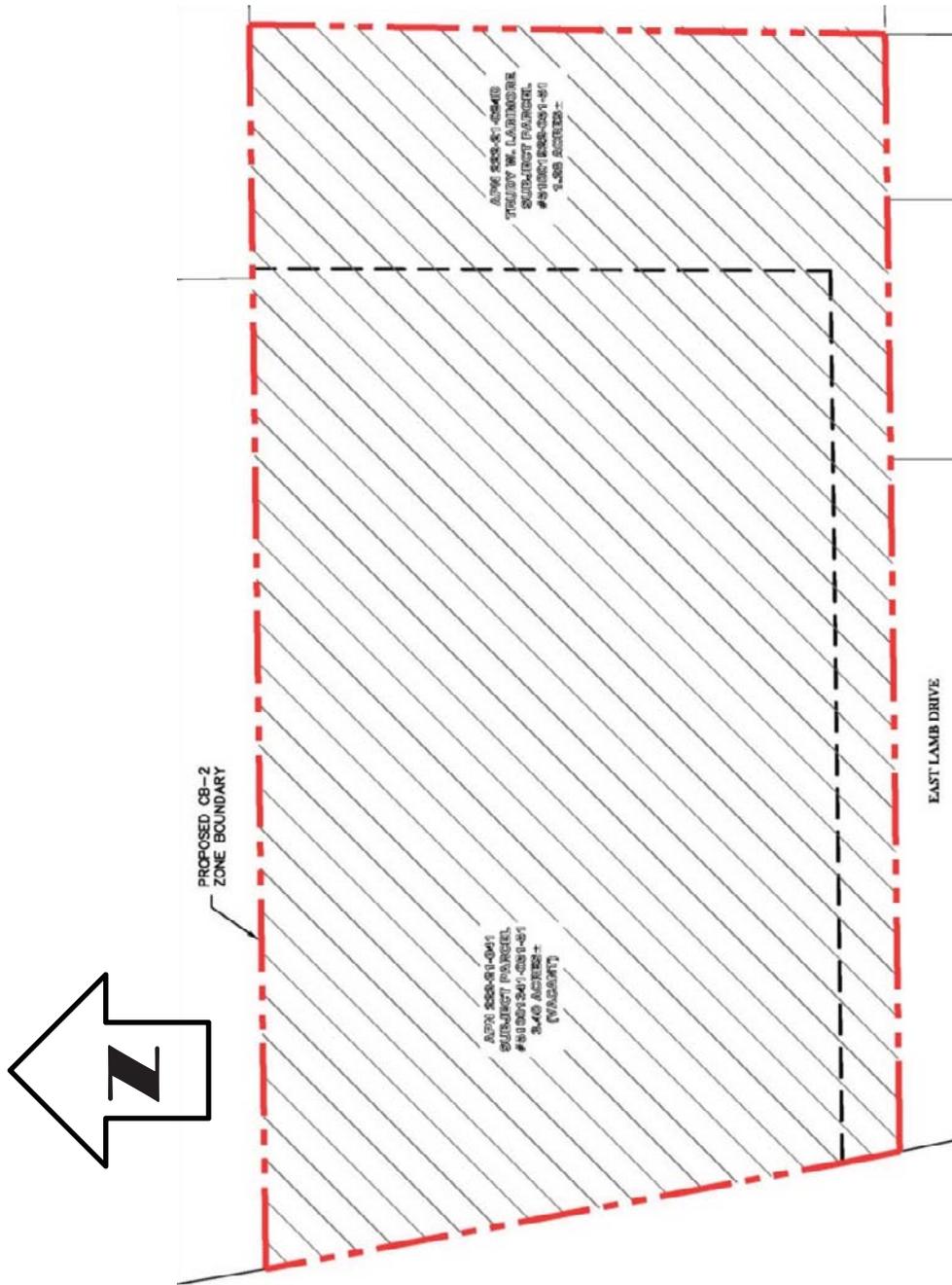


Exhibit II-A.1: Proposed Rezoning Boundary

2. Characteristics of the Proposed Development

The proposed development consists of a 21,702-sf Tractor Supply Company store with related site improvements including a 1,250-sf hay barn, site landscaping, paved parking and concrete hardscape, utilities and drainage infrastructure. Tractor Supply Company is the largest retail farm and ranch store chain in the United States. The company operates more than 1,085 retail stores in 44 states, employs more than 15,000 team members and is headquartered in Brentwood, Tennessee. Today Tractor Supply is a leading edge retailer with revenues of approximately \$4 billion. Stores supply the unique products to support their customers' rural lifestyle, from welders and generators to animal care products and men and women's work wear. They also offer pet supplies, animal feed, power tools, riding mowers, lawn and garden products and more. Each store team includes welders, farmers and horse owners who collectively provide an exceptional depth of knowledge and resources.

- a. Located along the multi-functional Oracle Road corridor along with existing commercial development projects, the proposed development is very well suited to the site. Oracle Road is currently being improved to a six-lane divided street section with 10-foot shoulders, raised center medians and left-turn lanes. These roadway improvements will enhance the proposed development and will significantly improve access to all commercial properties along Oracle Road. The proposed development balances applicable site constraints including existing topography and drainage patterns, easements, scenic view setbacks and landscape buffer yard requirements.
- b. The proposed project conforms to the Comprehensive Plan by offering mixed-use planning and compact development principles. The CB-2 commercial use allows for sales/display of Garden Equipment, Household items and Clothing/Accessories within a mixed commercial/residential area of Catalina.
- c. Meetings with surrounding property owners will be an integral part of the rezone process. Meetings are planned with the neighboring community and surrounding property owners as part of the public participation process.
- d. The proposed development will transform the undeveloped property into an active retail center that complements surrounding land uses. The planned improvements to Oracle road will mitigate any potential traffic impacts from the proposed development. Proposed access is intended to be combined with the secondary access driveway for Catalina Plaza through a joint use agreement.
- e. The proposed project contributes to the principles of smart growth by promoting mixed land use, development within an existing community, and encouraging community and stakeholder collaboration in the development process.
- f. The preliminary development plan implements an Energy Management System (EMS) inside the building to reduce the overall energy footprint. The proposed project also intends to use LED lighting to reduce overall energy consumption.

3. Overlay Zones

The proposed development is located within the Gateway Overlay Zone (18.78.010). A pre-application meeting for the Gateway Development Review Committee (DRC) was held on April 16, 2014. The proposed project intends to conform to all Gateway development requirements. These additional requirements have been considered in

development of this Site Analysis. Design/review submittals to the Gateway DRC are planned concurrent with the Pima County rezoning process.

B. Preliminary Development Plan (PDP)

1. PDP Overlay

The PDP is included in *Exhibit II-B.1*. A digital PDF copy is also provided for presentation purposes.

2. Support Data

The following information is provided in support of the PDP.

- a. Gross floor area is 21,702-sf for the main building and 1,250-sf for the hay barn.
- b. The proposed building height is 33'-7" for main building.
- c. There are no dwelling units proposed for this project.
- d. There is no residential element proposed for this project.
- e. According to the Pima County zoning ordinance, approximately 80 parking spaces are required for this project. Only 66 parking spaces are proposed due to applicable development constraints including site topography and drainage. The reduced parking is allowed under the *Individual Parking Reduction Plan* cited in Section 18.75.050.C of the Pima County Zoning Code. The Category I Traffic Impact Study (TIS) prepared as a supplement to this Site Analysis supports the proposed number of parking spaces.
- f. Proposed landscaping is in accordance with Pima County and Gateway standards.
- g. Open space and recreation areas are not proposed for this project.

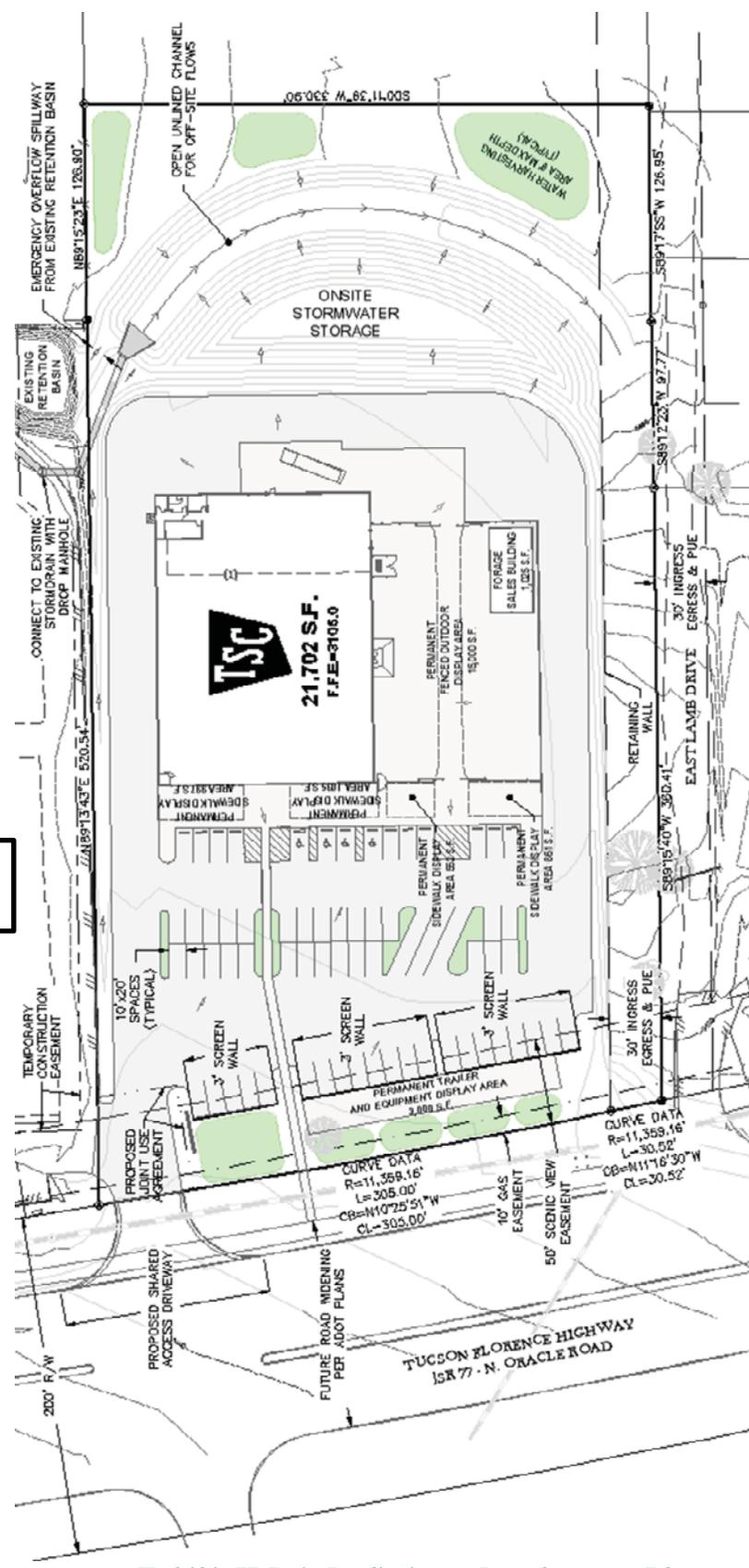
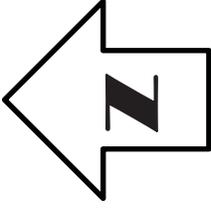


Exhibit II-B.1: Preliminary Development Plan

C. Topography & Grading

1. Features of the Development shown on the PDP

There are no slopes on the site that are 15% or greater. The proposed project will be placed on fill as required to promote continuity of existing drainage infrastructure and gravity flow to the existing sewer collection system. All proposed cut/fill slopes will be developed at a slope of 3:1 or flatter. A retaining wall is proposed along the southern boundary of the site to avoid significant grading within the existing 30-ft ingress, egress and public utility easement.

2. Areas to be left Natural

No areas are intended to be left natural for allowances provided under the Hillside Development Zone. The average cross slope of the total site will remain at 5% based on the following calculation:

$$\begin{aligned}
 ACS &= (I \times L \times 0.0023) / A & I &= \text{contour interval (1')} \\
 &= (1 \times 10,404 \times 0.0023) / 4.68 & L &= \text{combined length of contours (ft)} \\
 &= 5.1(5\%) & A &= \text{area (acres)}
 \end{aligned}$$

3. Site Disturbances

Nearly all of the site, except for portions of the existing ingress, egress and utility easement, will be disturbed in order to develop the property. Approximately 8% of the site, within the existing ingress, egress and utility easement, will remain undisturbed. All disturbed areas outside of proposed hardscape, approximately 33% of the site, will be re-vegetated. Proposed site disturbances are summarized on [Exhibit II-C.1](#).

4. Changes to Natural Grade

Areas where natural grade will change more than five feet by cut or fill are shown on [Exhibit II-C.1](#). The maximum change in natural elevation that will result from grading, along the southern boundary of the site, is approximately 10-ft.

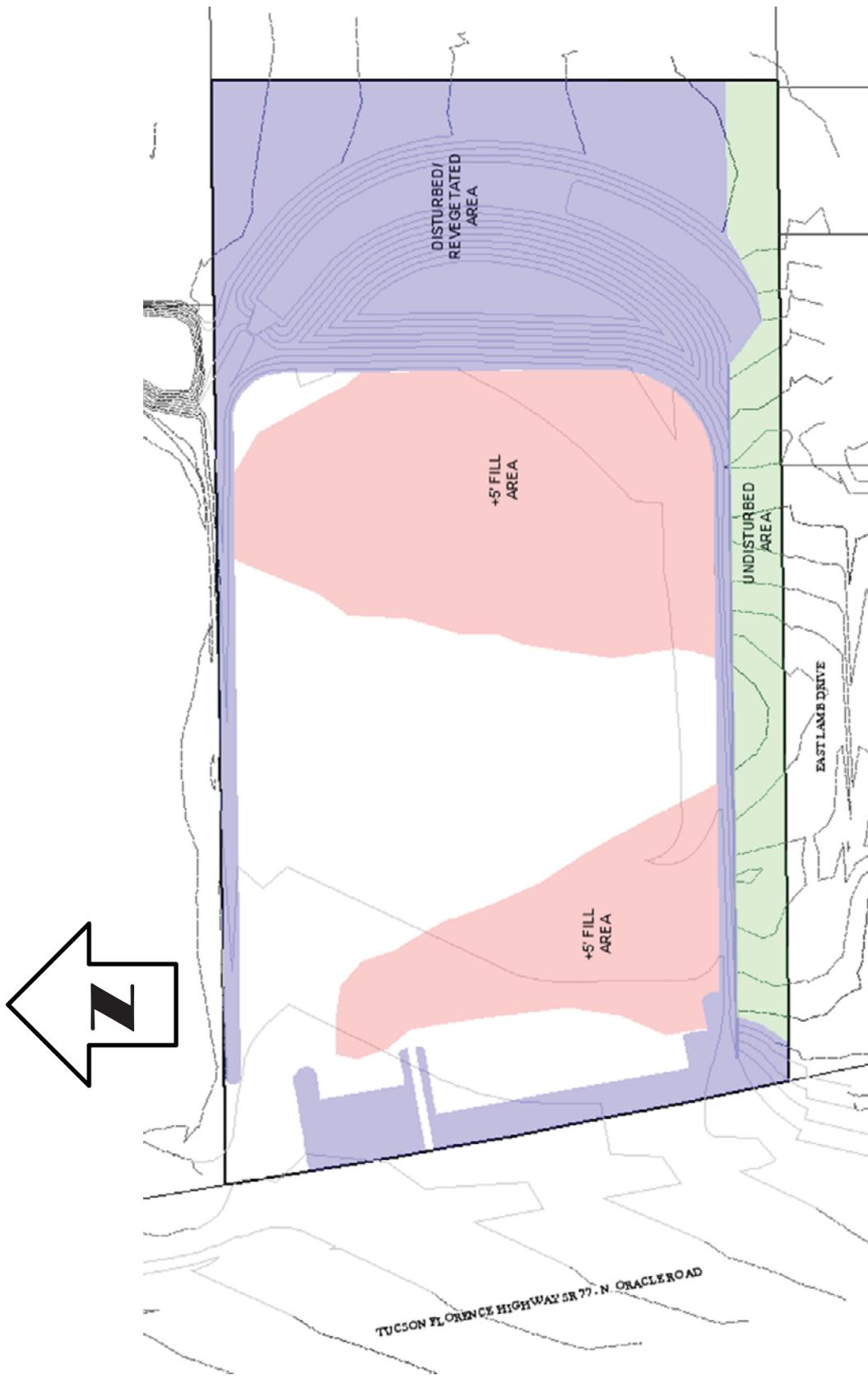


Exhibit II-C.1: Site Disturbances & Changes to Natural Grade

D. Hydrology

1. Hydrologic Characteristics of the PDP

Hydrologic characteristics of the PDP are shown in *Exhibit II-D.1*. The site layout and grading design is proposed to complement existing drainage conditions as much as practical. The proposed building is located as far west as possible, to allow for continuity of existing drainage improvements for Catalina Plaza, along the east side of the property.

All off-site flows from the north will be directed to an open, unlined channel that conveys flows across the property. On-site flows will be directed to an on-site stormwater storage area, which will eventually drain to the off-site flow channel. First-flush volumes will be included in the bottom of the stormwater storage area, along with a number of water harvesting areas throughout the site.

The volume of the proposed stormwater storage area is sufficient to offset the increase in contributing drainage area and imperviousness from site development. Given the arid environment and surface water dependent regulated riparian habitat immediately downstream, it is important that existing runoff rates are maintained as much as practical.

2. Floodplain Encroachment

There are no encroachments into existing 100-year floodplain areas.

3. Post-Development Discharges

The post-development discharges listed in *Exhibit II-D.1* show that discharges from the site are very similar to existing conditions. This is accomplished by onsite flow re-routing and stormwater storage provisions.

4. Engineering & Design Features

Engineering design features are shown in *Exhibit II-D.1* and are summarized below:

- Unlined drainage channel to convey off-site flows from the north across the site.
- Extend the existing 48-inch storm drain to the off-site flow channel.
- An overflow spillway from the existing retention basin to the off-site flow channel.
- Drainage swale along the north property line to convey runoff from the curb-cuts along the paved road south of Catalina Plaza to the off-site flow channel.
- On-site stormwater storage to mitigate increases in peak runoff.
 - Includes retention of first-flush volumes (9" maximum ponding depth).
 - Primary outlet structure will drain to the off-site drainage channel.
- Stormwater harvesting areas (9" maximum ponding depth) to count against the first-flush volume in the primary stormwater storage area. These harvesting areas are located along the property frontage, within the parking area, and along the east side of the off-site flow channel.
- Landscaping and re-vegetation is proposed for all disturbed areas outside of proposed hardscape.

5. PDP Conformance

Proposed drainage design conforms to the Pima County Floodplain Ordinance by mitigating peak runoff with ample retention provisions, reducing post-developed runoff conditions, and accommodating off-site flow concentrations impacting the site.

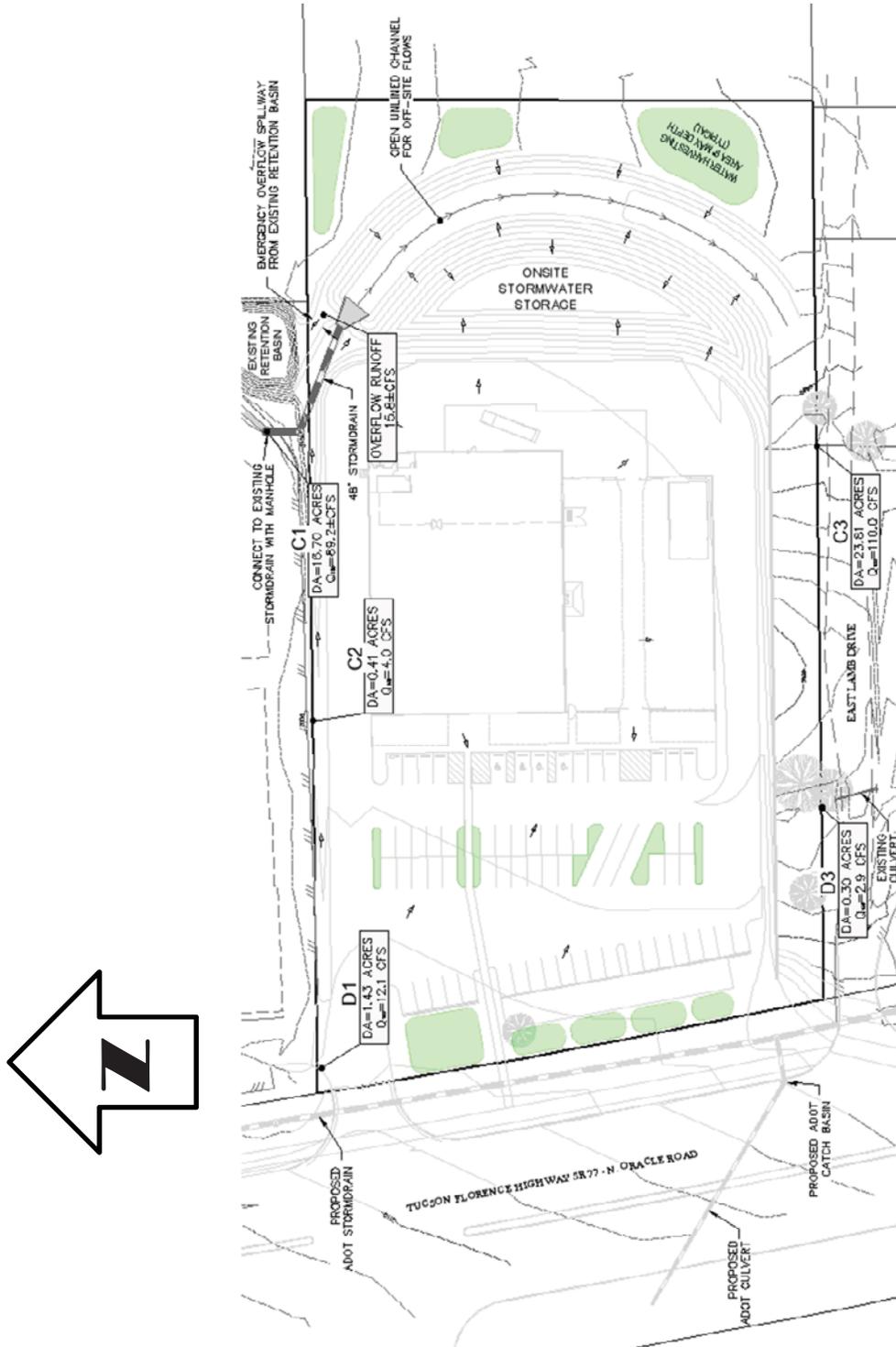


Exhibit II-D.1: PDP Hydrology

E. Biological Resources

1. Expected Impacts

As noted in the site inventory, there are no Conservation Land System designations on the site and there are no Saguaros, Ironwood trees, Pima pineapple cactus, Needle-spined pineapple cactus, or other areas of significant or important vegetation.

2. Conservation Lands System or Critical Landscape Connection

As noted in the site inventory, there are no Conservation Lands System categories or Critical Landscape Connections on the site.

F. Landscape & Buffer Plan

1. Landscape Buffer Plan

The proposed landscape and buffer plan is presented in *Exhibit II-F.1*. A 20-ft buffer yard is proposed on the frontage of the property along Oracle Road; the Gateway Overlay Zone requires a minimum 20-ft buffer yard along arterial and collector streets. A 10-ft buffer yard is proposed along the north boundary of the site, adjacent to Catalina Plaza. There is a 40-ft buffer yard proposed along the south boundary of the site, which includes the existing 30-ft ingress, egress and public utility easement adjacent to Lamb Drive. The buffer yard along the east boundary is nearly 170-ft, and includes the off-site flow channel and the storm water storage area.

2. Landscape Buffer Yard Conflicts

The existing 10-ft gas easement and 50-ft scenic view easement along Oracle Road affect the west buffer yard. Only small, shallow rooted vegetation will be planted within the 10-ft gas easement. Additionally, plantings in the west buffer yard, in front of the permanent trailer and equipment display area, are proposed to allow visibility from Oracle Road. Only small shrubs and high-limbed trees are proposed in this area. The trees in this buffer yard will be pruned regularly to allow visibility of the display area. The existing 30-ft ingress, egress and public utility easement adjacent to Lamb Drive will affect the south buffer yard. Site disturbance within the easement will be minimized and natural vegetation will be preserved as much as practical.

3. Vegetation Transplanted On-Site

Select plant species on the site will be transplanted to the buffer yards. Transplanted species will receive special attention, including maintaining southern exposure and regular irrigation schedules during the transplant period to ensure survival.

G. Viewsheds

1. Views & Vistas

Views and vistas from adjacent properties will not be blocked or impaired by development of the site. The majority of views in the area are of the Santa Catalina Mountains and Mount Lemmon to the east. There are no adjacent properties to the west, beyond Oracle Road, that will experience degraded views or vistas.

2. Mitigation Measures

The existing 50-ft scenic view easement along the frontage of the site was established to mitigate visual impacts along this scenic section of Oracle Road. Additionally, the Gateway Overlay Zone was established to protect the scenic quality of entry points into metropolitan Tucson and reduce visual impacts of development on scenic vistas. The proposed development conforms to these additional measures to protect scenic views and vistas along Oracle Road. The building setback is established at 245±ft from the nearest point of the Oracle road Right-of-Way, nearly five times the minimum allowed by the existing scenic view easement. Additional visual mitigation measures include buffer yard landscaping and downlighting in the parking areas.

H. Transportation

1. Access Points

Proposed access to the site from Oracle Road is presented in [Exhibit II-H.1](#). Access to the site will be through a joint Use Agreement with Catalina Plaza to the north. The design plans for Oracle Road show a new driveway at the existing secondary access driveway for Catalina Plaza. This driveway will be moved south approximately 37-ft to be centered on the new median opening, as recommended by ADOT. The geometry of the proposed shared driveway will be adequate to serve as the main entrance for Tractor Supply Company and secondary access for Catalina Plaza.

The existing 30-ft ingress, egress and public utility easement along the southern boundary was established for the benefit of several residential properties to the east, although Lamb Drive is located completely outside of the easement. Currently, the intent is to maintain the legal status this easement. Access is not proposed from Lamb Drive and no improvements are planned within the easement.

2. Future Road Improvements

ADOT is currently widening Oracle Road to a six-lane divided roadway as described in the site inventory. Construction of the Oracle Road widening is currently underway, and is expected to be completed by 2016. The Tractor Supply Company may be completed prior to the Oracle Road widening. Accordingly, temporary traffic control measures may be required and will be coordinated with ADOT to ensure safe access to Oracle Road.

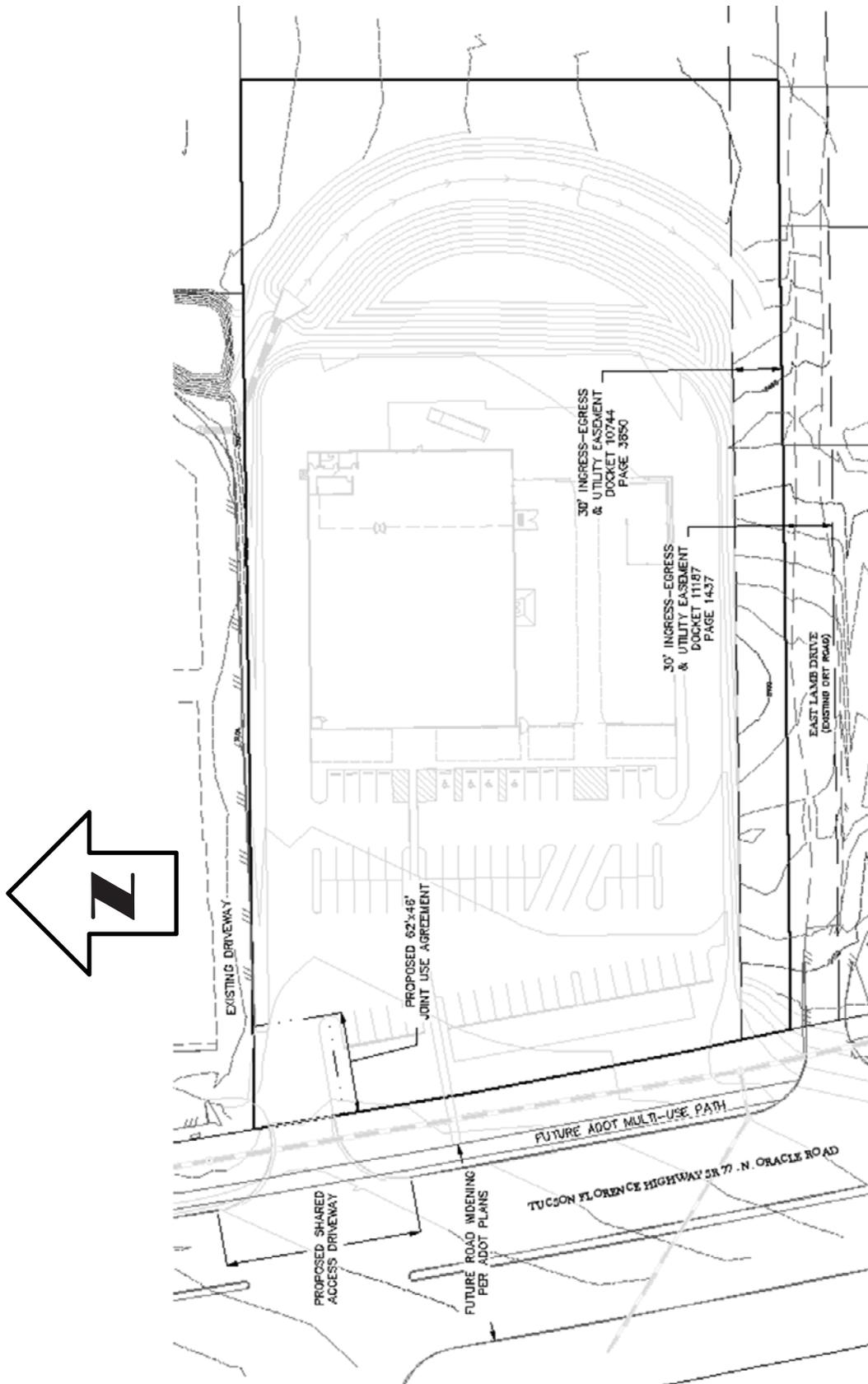


Exhibit II-H.1: Transportation

3. Changes to ADT and LOS

Impacts to Average Daily Traffic (ADT) and Level of Service (LOS) along Oracle Road will be negligible. Trip generation rates for the proposed development were estimated using the Hardware/Paint Store (Land Use 816) cited in the Institute of Transportation Engineers (ITE) Trip Generation Manual. According to the manual, the proposed development will generate 4.74 Weekday Peak Hour PM trips per 1,000-sf of gross floor area. This amounts to 102 total trips (54% entering and 46% exiting) based on a gross floor area of 21,702-sf. The projected trip generation rates are insignificant compared to the current traffic volume along Oracle Road (26,959 ADT). The LOS along this section of Oracle Road will be drastically improved due to the current widening of the roadway.

4. Traffic Impacts Minimized by PDP

Traffic impacts will be minimized with the proposed shared driveway along Oracle Road. The shared driveway will help with access control along Oracle Road by reducing the number of driveways in close proximity. No traffic is proposed along Lamb Drive, which is an unimproved roadway with no left turn capability onto Oracle Road based on the ADOT design plans.

5. Bicycle and Pedestrian Pathways

There are no bicycle or pedestrian pathways planned within the proposed development. Although, the ADOT design plans indicate a new multi-use path along the frontage of the project. The shared driveway will include a crosswalk along the multi-use path.

6. Typical On-Site Roadway Sections

There is no right-of-way planned within the proposed development. All drive aisles and parking areas will be private. The paved drive around the building was designed to accommodate a WB-65 vehicle template as required for delivery trucks.

7. Transportation Concurrency

The project is consistent with the Transportation Currency requirements of Pima County. No local road improvements are needed or triggered by this project.

8. Traffic Impact Study

A Traffic Impact Study is included with this Site Analysis.

9. Automobile Dependence

Automobile dependency will not be reduced by the project. The proposed development is a retail facility with relatively large consumer goods.

I. On-Site Wastewater Treatment & Disposal

On-site wastewater treatment/disposal facilities are not proposed for this project.

J. Sewers

1. Sewer Capacity Waiver

A Sewer Capacity Waiver was issued by Pima County Regional Wastewater Reclamation Department since estimated flows from the proposed development are less than 3,000-gpd. A copy of this waiver is included in *Exhibit II-J.1*. Projected estimated flows will not have a significant impact on the existing sewer collection system.

2. Method of Providing Sewer Service

There is an existing sewer manhole along the east side of Oracle Road, at the northwest corner of the subject property, identified as *IMS ID: 6921-01*. The downstream line segment from this manhole is *G-95-149*; there is a private line entering this manhole from the east and there are vacant stubs entering the manhole from the north and south. The intent is to connect to the existing stub on the south side of the manhole with a private 8-in sewer service connection.

3. Collection Sewers

There are no collection or transmission sewers planned for this project.

4. Site Constraints to Gravity Sewers

There are no site constraints that preclude this project from using gravity flow to the existing sewer collection system. The proposed project will be placed on fill as required to allow gravity flow to the existing sewer collection system.



PIMA COUNTY

REGIONAL WASTEWATER RECLAMATION DEPARTMENT

201 NORTH STONE AVENUE
TUCSON, ARIZONA 85701-1207

JACKSON JENKINS
DIRECTOR

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

Sewer Capacity Waiver 2014-82

Purpose: This document shall serve as an accounting of sewage flow estimates and will be associated with permitting Building Plans, Tentative Plats, Development Plans, and Site Plans.

Date:	4/15/2014
Project Name:	Tractor Supply Company
Parcel Numbers:	222210410, 22221024D
Total ADWF (gpd):	1,855
Existing Sewer Number:	G-95-149
IMS Manhole Number:	6921-01
Contact's Name:	Davin Benner
E-Mail Address:	davin@granitebasinengineering.com
Name of Contact's Firm:	Granite Basin Engineering, Inc.
Phone Number:	928-717-0171

Sewer Waiver Approved By: Kurt Stemm, CEA Date: 4/15/2014

Conditions of Waiver:

1. Proposed Estimated flows will not have significant effects on sewer system.
2. Proposed plans do not require ADEQ/PDEQ review based on the following:
 - Total ADWF is less than 3,000 gpd.
 - Sewage collection system does not include a manhole.
 - Sewage collection system does not include a force main or lift station.

Exhibit II-J.1: Sewer Capacity Waiver

K. Water

Refer to the Preliminary Integrated Water Management Plan (Attachment A).

L. Schools

This section is not applicable since the project does not include residential uses.

M. Recreation & Trails

This section is not applicable since the project does not include any recreation or trails.

N. Cultural Resources: Archaeological & Historic Sites

1. Mitigation Measures

Mitigation measures are not required since no archaeological or historic sites are located on the site.

2. Archeological Survey

An Archeological Survey was prepared for this project by Professional Archeological Services of Tucson. A copy of the survey is included in Attachment C.

3. Cultural Resources Mitigation Plan

A mitigation plan is not required since no cultural resources are located on the site.

O. Environmental Quality

1. Control of Dust Pollution

A Stormwater Pollution Prevention Plan (SWPPP) will be developed for this project in accordance with the Arizona Department of Environmental Quality (ADEQ) Construction General Permit (CGP). The SWPPP will include an Erosion Control Plan and dust abatement measures as required under the CGP. Additionally, a Fugitive Dust Activity Permit Application will be submitted to the Pima County Department of Environmental Quality prior to any construction activity.

2. Control of Emissions

The project is not a stationary source of air pollution as defined by the Pima County Department of Environmental Quality. The proposed development does not use or store any hazardous materials on-site.

P. Agreements

1. Agreements with Neighboring Properties

Agreements must be established with the adjacent property owner to the north (Catalina Plaza). The agreements will include a Joint Use Agreement for the shared driveway as required by ADOT and a Temporary Construction Easement for the following items:

- Construction of the shared access driveway.
- Removal of the existing retaining wall between the properties.
- Connection to the existing 48-in storm drain and related drainage infrastructure.

2. Existing & Historic Water Use

The property is undeveloped. There is no existing or historic water use.

3. Proposed Water Use

Proposed water use generally includes commercial use for building fixtures and irrigation. Building fixtures include two (2) water fountains, one (1) utility sink, three (3) lavatory sinks, one (1) urinal, two (2) water closets and two (2) floor drain/sinks. Irrigation use includes a drip system planned for landscape buffer yards.

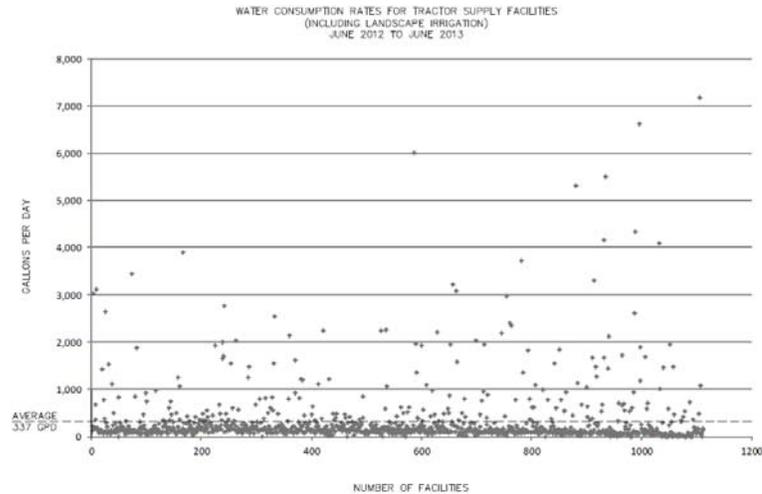
4. Water Supply & Delivery

The Lago Del Oro Water Company maintains an existing water distribution system that is adequate to serve this project. The extent of the water distribution system is shown in the Water Context Map. There is an existing 8-in water main along the frontage of Oracle Road and there is an existing 6-in water main along Lamb Road. The Water Context Map shows a 2-in line in Lamb Road; this line was recently replaced with a 6-in main. Flow tests were performed on surrounding fire hydrants and the results indicate that there is adequate flow and pressure available to satisfy minimum fire flow requirements of the Golder Ranch Fire District. The intent is to tap the existing 8-in water main along Oracle Road with a 6-in fire line and a commercial service connection.



5. Water Demand Projections

Water demand projections were estimated using average water consumption rates for 1,090 Tractor Supply Company stores throughout the country. A graph of the historical water usage is included below. The high flow outliers shown in the graph are attributed to high landscape water consumption at these facilities, and are not representative of the irrigation demands for this project. Based on the historical water use data, the average daily demand for this project is estimated to be 337-gpd. As a conservative estimate, 500-gpd (0.56-af/yr) is assumed for this project to include domestic and irrigation uses.



Water demand projections were also estimated using ADWR’s demand calculator spreadsheet as a comparison of historical water use data (see page 42). According to the spreadsheet, the demand factor for commercial use is 2.25-af/ac, and the demand factor for retention/detention basins is 0.9-af/ac. These demand factors yield a total projected water use of 3.84-af/yr, nearly seven (7) times that estimated from historical water use. The higher water use projection still suggests little to no negative impact, but we believe historical water records are the most accurate way to determine projected water use.

Water conservation measures planned for the project include both indoor and outdoor options. The applicable options from *Table B – Water Conservation Measures*, and the allotted points for each measure are listed below. Planned water conservation measures total 17.5 points, greater than the minimum 15 points required.

<i>Item</i>	<i>Description</i>	<i>Points</i>
I-6	WaterSense™ lavatory faucets	3
I-9	Dual flush toilets	3
I-14	No garbage disposal	1
O-6	No swimming pool	2
O-7	No water features	1
O-12	Draught tolerant, non-irrigated landscaping design	4
O-14	Retention plan for rainwater	1
O-15	High efficiency irrigation system	2.5
<i>Total</i>		<i>17.5</i>

June 23, 2014

PROJECT DEMAND CALCULATOR

Name of Proposed Project:

Catalina Tractor Supply Company

INSTRUCTIONS: This spreadsheet is designed to help you calculate the water demand for your proposed development for purposes of applying for a Certificate of Assured Water Supply, Water Adequacy Report or Analysis of Assured (or Adequate) Water Supply. Please enter information into the blue boxes as applicable. If you need help with this form, please contact the Office of Assured and Adequate Water Supply at (602) 771-8599.

NOTE: This sheet, when completed, does not constitute approval of the demand estimate for your proposed development. It is intended for general estimation purposes only. The final, official demand estimates will be determined by the Department upon review of your complete application.

Enter the AMA the subdivision is located in*: **TUC** * Enter PHX for Phoenix, TUC for Tucson, PIN for Pinal, PRE for Prescott or SCR for Santa Cruz.
If you are not sure if you are located inside or outside of an AMA, contact the Office of Assured and Adequate Water Supply at (602) 771-8599.

Enter the COUNTY the subdivision is located in: **PIMA** * Enter either APACHE, COCHISE, COCONINO, GILA, GRAHAM, GREENLEE, LA PAZ, MARICOPA, MOHAVE, NAVAJO, PIMA, PINAL, SANTA CRUZ, YAVAPAI, or YUMA.

Residential Usage*					
Category	PPHU	GPCD or per house/day	Demand/HU/YR (af/yr)	No. HU (Lots)	Residential Demand/Yr (af/yr)
Single Family (int)		57.00	0.00		0.00
Multi-Family (int)		57.00	0.00		0.00
Single Family Landscape (ext)	1.00	118.00	0.13	0.00	0.00
Multi-Family Landscape (ext)	0.00	21.00	0.00	0.00	0.00
Single family Demand/HU/YR			0.13		
Multi-family Demand/HU/YR			0.00		

	Square Feet	Acres	Demand Factor (af/yr)	No. HU (Lots)	Large Lot Adjustment Demand/Yr (af/yr)
Average Lot Size (sq. ft)**	0.00	0.00			
TMP Model Lot Size (sq. ft)	7,500 - 10,000	0.17 - 0.23			
Large Lot Adjustment	0.00	0.00			
1/2 low water use	0.00	0.00	1.50	0.00	0.00
1/2 turf	0.00	0.00	4.60	0.00	0.00

**NOTE: If the subdivision contains several groupings of lot sizes, the large lot adjustment needs to be calculated for each grouping of large lot sizes.
If CC&Rs with landscaping restrictions for the residential lots will be adopted, a modified large lot adjustment can be calculated based on the specific landscaping restrictions.
Contact the Office of Assured and Adequate Water Supply for assistance in calculating the large lot adjustment for subdivisions with several groupings of large lot sizes or if CC&Rs limiting landscaping within the residential lots will be adopted.

Total Residential Demand **0.00**

Non-Residential Usage***

For each category please enter either square feet or acres of land for that type of non-residential use within your subdivision

Category	Square Feet	Acres	Demand Factor (af/ac)	Non-Residential Demand (af/yr)
Common Area1		0.00	1.50 low water use	0.00
Common Area2		0.00	4.60 turf	0.00
Right of Way		0.00	1.50 low water use	0.00
Golf Course		0.00	AMA Turf Program - contact AMA	0.00
Commercial use	40891.00	0.94	2.25 all acres	2.11
Public Pool (length x width = square feet)		0.00	Based on closest AMA pool	0.00
Parks1		0.00	1.50 low water use	0.00
Parks2		0.00	4.60 turf	0.00
Retention/Detention Basins	40000.00	0.92	1.50 low water use	1.38
Retention/Detention Basins		0.00	4.60 turf	0.00
School Landscape1		0.00	1.50 low water use	0.00
School Landscape2		0.00	4.60 turf	0.00
	Number of students			
Elementary school interior use	0.00		25 GPCD interior demand	0.00
Middle/High School interior use	0.00		43 GPCD interior demand	0.00

***NOTE: If your application is for a change of ownership from a previously issued Certificate of Assured Water Supply, and is for only a portion of the original Certificate, contact the Office of Assured and Adequate Water Supply to pro-rate non-residential area acreage.

Total Non-Residential Demand **3.49**

Distribution Losses	Residential	Non-Residential	Total	Loss Factor %	Distribution Losses (af/yr)
Demand af/yr	0.00	3.49	3.49	10.00	0.35

Construction	No. of Lots	Demand (gals/lot)	100 yr demand (af)	Construction Demand (af/yr)
	0.00	10000.00	0.25	0.00

Total Demand Per Year					
Residential Usage af/yr	Non-Residential Usage	Lost & Unaccounted for	Construction	Total Non-Res	Total Demand Per Year (af/yr)
0.00	3.49	0.35	0.00	3.84	3.84

Residential Usage GPCD	#DIV0!				Total Demand GPCD
	#DIV0!				#DIV0!
Annual Build Out Demand					3.84

6. Proximity to Renewable & Potable Water Supplies

There are no renewable or potable water supplies available to serve the project.

7. Groundwater Dependent Ecosystems

This section is not applicable since estimated water demand is less than 50 acre-feet/year.

8. Groundwater Depth & Trends

This section is not applicable since water service is provided by a Municipal Provider, no new wells will be drilled to serve this project, and no increase in pumping is required to serve this project.

9. Geologic & Hydrogeologic Data

This section is not applicable since water service is provided by a Municipal Provider, no new wells will be drilled to serve this project, and no increase in pumping is required to serve this project.

10. Area Water Supply

This section is not applicable since water service is provided by a Municipal Provider, no new wells will be drilled to serve this project, and no increase in pumping is required to serve this project.

11. Well Test Data

This section is not applicable since water service is provided by a Municipal Provider, no new wells will be drilled to serve this project, and no increase in pumping is required to serve this project.

12. Drawdown Analysis

This section is not applicable since water service is provided by a Municipal Provider, no new wells will be drilled to serve this project, and no increase in pumping is required to serve this project.

Attachment B – Biological Impact Report

Biological Impact Report

For Rezoning

Approximately 3.4 acres
NE Corner of Oracle Road and E Lamb Drive
Pima County, Arizona
Assessor's Parcel 222-21-0410



Prepared for:

Catalina Development Group, LLC
155 W New York Avenue, Suite 200
Southern Pines, NC 28387

Prepared by:



Revised December 20, 2013

Biological Impact Report
 NE Corner of Oracle Road and East Lambert Drive, Pima County, AZ
 Assessor's Parcel Number 222-21-0410

Introduction

This Biological Impact Report was prepared for Catalina Development Group, LLC by Darling Geomatics for Pima County as part of a rezoning application for an approximately 3.4 acre project at the northeast corner of Oracle Road and East Lambert Drive, Pima County, Arizona. The Assessor's Parcel Number is 222-21-0410. The report is in compliance with Pima County Ordinance No. 2001-103, Chapter 18.91 Zoning Code amendment.

As discussed in detail below, there will be no impact to threatened or endangered species or to Maeveen Marie Behan Conservation Lands System (CLS) priorities including no impact to Important Riparian Areas or other special species management areas due to the proposed rezoning.

A. Maeveen Marie Behan Conservation Lands System and Important Riparian Areas

The site is outside all major washes and outside all Maeveen Marie Behan Conservation Lands System Category including Important Riparian Areas and Special Species Management Areas as shown in Figure 1 below.



Figure 1. Proposed Project Site in relation to Pima County CLS (Multiple Use Management Areas (Green) and Important Riparian Areas (Blue)).

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 NE Corner of Oracle Road and East Lambert Drive, Pima County, AZ
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B. Critical Landscape Linkages

By definition, Critical Landscape Linkages are areas where habitat loss and fragmentation by roads and other infrastructure pose major challenges to wildlife movement. As shown in Figure 2, the proposed project site is not near wildlife movement features

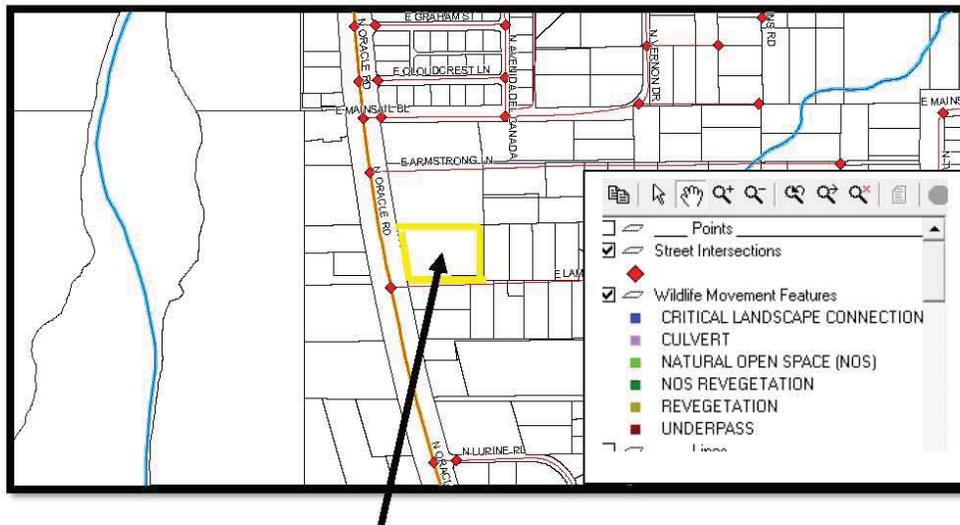


Figure 2. Proposed Project Site in Relation to Wildlife Movement Features

As shown in Figure 3, below, the project site is not within a mapped wildlife linkage area depicted by Arizona Game and Fish Department (AGFD). The site borders Oracle Road, a major transportation route. The AGFD routes and linkages for wildlife are to the south of the proposed project site.

The project area is, however, within the Arizona Department of Transportation (ADOT) wildlife linkage map as shown in Figure 4 below. However, since ADOT has mapped over 100 square miles as part of the wildlife linkage and the proposed project is so small and so close to Oracle Road, which is heavily used by vehicular traffic, the proposed project is likely to have no effect on the overall linkage.

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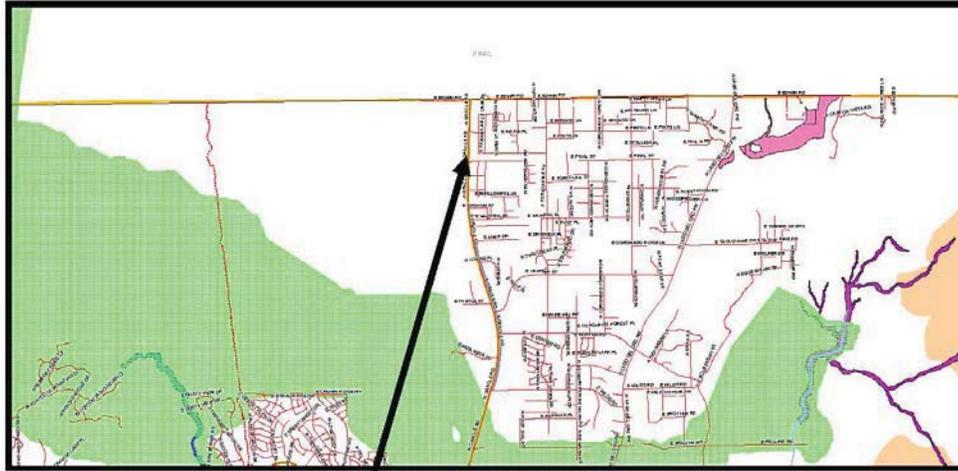


Figure 3. Proposed Project Site in Relation to AGFD Wildlife Linkage Map



Figure 4. Proposed Project Site in Relation to ADOT 2006 Wildlife Linkages and Corridor

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C. Habitat Protection and Community Open Space Priority Acquisition

The parcel is NOT a Habitat Protection or Community Open Space priority acquisition property, as displayed on the Pima County SDCP MapGuide.

D. Species-Specific Information (including Pertinent Federally-Threatened and Endangered Species) and Other Special Status Species

Cactus Ferruginous Pygmy-owl:

1. The proposed project site is NOT within the Priority Conservation Area for the cactus ferruginous pygmy-owl.
2. No cactus ferruginous pygmy-owls have been found on the proposed project site.
3. The proposed project site has NOT been surveyed for pygmy-owls because there are no saguaro cacti or other cavity nesting plants on the site, thus no habitat for the pygmy-owl. No surveys are planned due to lack of habitat.

Western Burrowing Owl:

1. The proposed project site is NOT within the Priority Conservation Area for the western burrowing owl.
2. No western burrowing owls have been found on the proposed project site.
3. The proposed project site has NOT been surveyed for burrowing owls because it lacks the appropriate soils for burrows. No surveys are planned in the future due to lack of potential habitat.

Pima Pineapple Cactus:

1. The proposed project site does NOT occur within the Priority Conservation Area for the Pima pineapple cactus.
2. No Pima pineapple cactus been found on the proposed project site.
3. The proposed project site has NOT been surveyed for Pima pineapple cactus because of lack of potential habitat. The project site is not within the range of the species. No surveys are planned in the future.

Acuna Cactus:

1. The proposed project site does NOT occur within the Priority Conservation Area for the Acuna cactus.
2. No Acuna cactus have been found on the proposed project site.

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3. The proposed project site has NOT been surveyed for Acuna cactus because of lack of potential habitat. The project site is not within the range of the species. No surveys are planned in the future.

Needle-Spined Pineapple Cactus:

1. The proposed project site does NOT occur within the Priority Conservation Area for the needle-spined pineapple cactus.
2. No needle-spined cactus have been found on the proposed project site.
3. No needle-spined pineapple cactus surveys are planned because it is outside of the distribution range for this species.

E. Special Elements and Vegetation

The project area is not within an area mapped by Pima County as having any Special Elements (limestone outcrops, cattails, cottonwood-willow, etc.). Vegetation is mapped by the County in the SWReGAP as Developed Open Space – Low Intensity.

SUMMARY:

There will be no impact to threatened or endangered species or to Maeveen Marie Behan Conservation Lands System (CLS) priorities including no impact to Important Riparian Areas or other special species management areas due to the proposed rezoning.

This report may be relied upon and used by Pima County and any of the following entities:

- Catalina Development Group, LLC
- Branch Banking & Trust, a North Carolina Banking Corporation
- Tractor Supply Company, a Delaware Corporation
- General Contractor- to be determined

A qualified biologist prepared this Biological Impact Report.

PREPARER: I prepared this Biological Impact Report.

Mary E. Darling

Mary Darling, MS, JD
Principal, Darling Geomatics

Darling Geomatics, University of Arizona Science and Technology Park | 9040 South Rita Road, Ste #2350 | Tucson, AZ 85747

Attachment C – Archeological Survey

ARCHAEOLOGICAL SURVEY OF THE ORACLE/LAMB NEC (PARCEL 222-21-0410) PROJECT NEAR CATALINA, PIMA COUNTY, ARIZONA

Submitted to:

Catalina Development Group, LLC
155 W. New York Ave. #200
Southern Pines, NC 28387

Submitted by

Professional Archaeological Services of Tucson
5036 Golder Ranch Rd.
Tucson, AZ 85739-4265

Prepared by

David V.M. Stephen Ph.D.

Principal Investigator

State Antiquities Permit No. 2013-052bl

P.A.S.T. Cultural Resources Report No. 132018

9/11/2013

MANAGEMENT SUMMARY & TABLE OF CONTENTSs

REPORT TITLE:

Archaeological Survey Of The **Oracle/Lamb NEC (Parcel 222-21-0410)** Project
Near Catalina, Pima County, Arizona

REPORT DATE: 9/11/2013

INSTITUTION/CONSULTANT:

Professional Archaeological Services of Tucson (PAST)
with David V. M. Stephen, Ph.D. as principal investigator

AGENCY/LAND OWNERSHIP: Private

PERMIT NUMBER: ASM 2013-052bl

PROJECT TITLE:

Oracle/Lamb NEC (Parcel 222-21-0410) Archaeological Survey, PAST No. 132018

PROJECT DESCRIPTION:

Systematic survey to determine the extent of cultural resources on lands that had either not undergone a complete, intensive archaeological survey or sufficient time had passed since an earlier study suggesting cultural resources may now be exposed that would not have been documented by the initial field work.

PROJECT LOCATION:

Within NW4 of NW4 Section 9 T11S R14E G&SRB&M near, Catalina, AZ. 3.4 acres

DATES OF FIELDWORK/PERSON-DAYS EXPENDED:

September 11, 2013, 1 person-field day

REGISTER-ELIGIBLE SITES: NONE

INELIGIBLE SITES: NONE

CURATION FACILITY: NA Vicinity Sites, Isolates and Modern.

(Please See Following Form For Additional Information Keyed to ASM/SHPO Report Sections (D1 through D11))

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P.A.S.T. PROJECT SUMMARY FORM

P.A.S.T. JOB NO. 132018

OVERVIEW. An on-foot archaeological survey of private property (3.4 acres) in anticipation of ground disturbing activities near Catalina in Pima County identified no cultural resources and zero isolated artifacts.

INTRODUCTION					
(D1) Archaeological Survey Of The Oracle/Lamb (Parcel 222-21-0410) Project					
Near Catalina, Pima County, AZ.				(D2) 9/11/2013	
(D3) Agency Name:					
(D4) ASM Permit No.		2013-052bl		Accession No.	
(D5) Project Description: The land is slated for commercial development.					
(D6) Agency Reference:				Other Permits: NA	
Project Sponsor:		Catalina Development Group, LLC			
(D7) PROJECT LOCATION INFORMATION (see also attached copy of USGS map)					
County:	Pima	Vicinity of	Catalina	AZ	Parcel No. 222210410
Legal:	Within the NW4 of NW4 Section 9 T11S R14E G&SRB&M				
AZ QUAD		USGS MAP NAME		MAP SCALE	
1. BB:9 NW		Oro Valley		7.5'	
(D8) SURVEY INFORMATION					
Type:	Non-collection on-foot survey with systematic 20m transects or equal			Person-days	1
3.4 acres AND/OR 0 miles long BY 0 foot wide right-of-way			Percent surveyed	100%	
Land Ownership	Private				
Field Crew	D. Stephen		Project Director:	David Stephen	
Field Work Dates	September 11, 2013		Ground visibility was effected	severely	
Additional Survey Records Submitted:	None		Artifact Collections Submitted to ASM:	None	
(D9-10) CULTURAL RESOURCES WITHIN PROJECT AREA (see report narrative for additional information)					
Archives Researched:	ASM/AZSITE <input checked="" type="checkbox"/>	GLO <input checked="" type="checkbox"/>	SHPO <input type="checkbox"/>	MNA <input type="checkbox"/>	Other:
Numbers of eligible sites	NA		Numbers of ineligible sites NA		
Previously recorded sites	NA		New sites found this project NA		
Artifact scatters	NONE		Total sites NONE		
Known sites within 160m	BB:9:17 & 41 (ASM)		Isolate density/total artifacts	<1 per acre 0	
Sites in 1.6 km radius	Both above are linear sites in or near Oracle Rd. ROW(see Table A-2a)				
Prior Surveys	No full coverage. See table A-2b for adjacent lands surveys				
(D11) RECOMMENDATIONS FOR FURTHER WORK (see also comments below)					
FURTHER WORK RECOMMENDED		NONE <input checked="" type="checkbox"/> OR			
SITE RECORDING <input type="checkbox"/>		MONITORING <input type="checkbox"/>		SUB-SURFACE TESTING <input type="checkbox"/> DATA RECOVERY <input type="checkbox"/>	
COMMENTS (see report narrative additional information)					
The quantity of artifacts within the study area and data about known sites in the area suggests the undertaking will impact no cultural resources. Based on the fieldwork and archival documentation, the project sponsor should be allowed to develop the subject property without further cultural resource studies.					
Form Completed By	David Stephen		Form Rev. 1/12	Date	9/11/2013

**Archaeological Survey Of The
Oracle/Lamb NEC (Parcel 222-21-0410) Project
Near Catalina, Pima County, Arizona
PAST No. 132018**

Introduction.

Personnel from P.A.S.T. conducted a 1 person-day, survey of the Oracle/Lamb (Parcel 222-21-0410) project on September 11, 2013 located in Pima County near Catalina in anticipation of commercial development. The purpose of the project was to determine whether any significant cultural resources that might be adversely impacted by construction were present. The project sponsor (Catalina Development Group, LLC) initiated this study in accordance with municipal requirements. P.A.S.T. holds permit 2013-052bl issued under the Arizona Antiquities Act through the Arizona State Museum.

Project Location and Ownership.

The approximately 3.4-acre project area is located in the northwestern portion of the Tucson Basin (Figure 1). The project area is located on the Oro Valley United States Geological Survey 7.5' map. The location with respect to the Public Land Survey System is within the NW4 of NW4 of Section 9 T11S R14E G&SRB&M. The UTM values for selected boundary points are shown on the map to indicate the approximate extent of the parcel. The boundary shown on the map is reasonably accurate given the limitations of a 1:24,000 scale map. It is based on data and maps provided by the client as well as field observations but it is not intended to represent the precise legal extent of the parcel. Unless otherwise noted, land ownership coincides with the parcel and survey boundary shown in Figure 1. The fieldwork was conducted on private lands.

Base Maps Included In Report

Figure 1 is a copy of a portion of the U.S.G.S. Oro Valley 7.5-minute topographic map that shows the project boundaries, archaeological sites within the project area, and all isolated artifacts and features found during the survey. Table A-1, located at the end of the report, provides coordinate and other information for these isolates. Projects with boundaries extending across multiple U.S.G.S. maps are so noted on page ii and in the lower left of Figure 1.

BACKGROUND TO STUDY AREA:**Effective Environment.**

The study area is within the Basin and Range physiographic province at an approximate elevation of 3,099 feet. Project area vegetation is typical of the Arizona Upland subdivision of the Sonoran Desertscrub biotic province (Turner and Brown 1982) predominately comprised of mesquite, prickly pear, desert broom, acacia and annual grasses.

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Figure 1. Oro Valley U.S.G.S. 7.5' MAP (T11S R14E)



NOTE: Due to the sensitivity of site locations, only sites within the project area are depicted on the map. Site, IO, and study area locations as well as their geometric representation and extent are approximate. + = isolate

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Culture History.

The antiquity laws apply to human cultural remains in excess of 50 years of age and require them to be assessed as to their potential for yielding important information. Consequently, sites and artifacts dating from the mid twentieth century and earlier must be evaluated.

The Historical Period. This period commenced in roughly 1700 is comprised of the Spanish, Mexican and Anglo occupations with some researchers recognizing the protohistoric as a transitional culture from the earlier prehistoric occupations. The prehistoric peoples who lived in this region include the Hohokam, Archaic and Paleoindian cultures.

The Hohokam (A.D. 450 - 1450). The Hohokam were a sedentary, agriculture-based people who produced both plain and decorated pottery, along with numerous other crafts of shell, stone and clay. They were skillful agriculturists who lived in houses built in shallow pits (pithouses) and constructed extensive irrigation canal systems. In some of the larger villages, they built ballcourts that probably served as focal points for ceremonial or recreational activities. Whether the Hohokam migrated into the region from Mexico or developed from indigenous Archaic populations is still hotly debated. The Hohokam cultural sequence was established in the 1930s based on the decorated pottery types unearthed at the Snaketown Site in the Phoenix Basin. Shortly thereafter, Isabel Kelly modified this chronology to fit the Tucson Basin sequence after her excavations at the Hodges Ruin in northwest Tucson. Since that time, the continual acquisition of new archaeological data has brought about many refinements in the chronology.

Archaic Era (7500 B.C. - A.D. 450). The Archaic era has traditionally been characterized by assemblages of chipped stone artifacts along with ground stone tools for processing plant materials, and a lack of ceramics. Recent research in the Tucson Basin and elsewhere has demonstrated the presence of pit house villages, agriculture and some ceramics in the Late Archaic. The shift from a hunting-based economy to a reliance on plant foraging and small-game hunting that characterized the Archaic sites was caused by the extinction of Pleistocene mammals favored by the Paleoindians (see below).

Paleo-Indian Era (ca. 10,000 - 7500 B.C.). Approximately eleven thousand years ago, the climate in the Southwestern United States was considerably wetter and cooler than it is today, and much of the terrain consisted of lush grasslands that supported herds of mammoth, bison and other large grazing animals. Many of the earliest occupants of the area, known as Paleoindians, were hunters who subsisted on these large, late Pleistocene mammals. The belief that many of the Paleoindians were primarily big-game hunters is supported by the fact that most of the Paleo-Indian sites that have been excavated have been kill and butchering sites. The artifact assemblages from these sites are made up of projectile points and other stone tools suitable for skinning animals and cutting meat and bone. The earliest Paleo-Indian artifacts found in southern Arizona belong to the Clovis complex (9500-9000 B.C.), which is characterized by long, lanceolate, fluted Clovis points, along with other stone implements and bone artifacts.

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Arizona State Museum Site Definition Standard (ASM 1993).

The determination of what constitutes an archaeological site is, to a certain extent, a matter of professional judgment. However, if certain minimal archaeological discoveries (listed below) are encountered, then an ASM site card must be completed and submitted. In other words, if the archaeological discoveries exceed the minimum criteria listed below, a site card must be filled out. Sites that do not meet the minimum standards, but which the archaeologist deems worthy of site status, may also be assigned ASM numbers.

Most archaeologists define sites based on consideration of age of remains as well as density and diversity of artifacts and features and the spatial arrangements of these remains within the area under consideration. The following guidelines should be used to define archaeological sites:

All sites should contain:

1. physical remains of past human activity that are at least 50 years old.

Additionally, sites should consist of at least one of the following:

2. 30+ artifacts of a single class (i.e., 30 sherds, 30 lithics, 30 tin cans) within an area 15 meters (50 feet) in diameter, except when all pieces appear to originate from a single source (i.e., one ceramic pot, one core, one glass bottle).
3. 20+ artifacts which include at least 2 classes of artifact types (i.e., sherds, groundstone, nails, glass) within an area 15 meters (50 feet) in diameter,
4. one or more archaeological features in temporal association with any number of artifacts.
5. two or more temporally associated archaeological features without artifacts.

Non-linear, isolated features without associated artifacts may be recorded. An "isolated feature" is defined as a feature that does not have any other features within a 100-meter (325 feet) diameter. This might include isolated rock piles, mine shafts, prospecting pits or unidentified depressions without artifact associations.

Criteria for the Evaluation of Cultural Resources.

Although archaeological and historical sites may qualify for formal recording under state standards, they generally are not considered significant unless they are eligible for listing in the Arizona or National Register of Historic Places. According to the current standards a property must possess sufficient integrity, significance and antiquity to be listed in the Register. In addition to being at least 50 years of age a resource must meet the criteria set forth below:

The quality of significance in American or Arizona history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or

- C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded, or may be likely to yield, information important in prehistory or history (National Park Service 1986)

ARCHAEOLOGICAL SURVEY:

Survey Expectations.

This project's study area was located in a portion of southern Arizona that is conducive to prehistoric and/or historical settlement. Therefore, it was considered a reasonable likelihood that prehistoric or historical sites would be found during the survey.

Records Review.

A review of the records of the Arizona State Museum (ASM), in anticipation of the survey, revealed that the subject parcel had either not undergone a complete, intensive archaeological survey or sufficient time had passed since an earlier study suggesting heretofore undiscovered cultural resources may have been subsequently exposed that would not have been documented by any earlier field work. The ASM records, as well as the other archives indicated on the associated project form, revealed no recorded cultural resources on the inspected parcel. There are no previous surveys documented within the study area. GLO surveyor's maps (Curry & Jacobs 1908) showed the road to Mammoth from Tucson and another unnamed road for T11S R14E G&SRB&M in the vicinity of Section 9. Previously recorded cultural resources within a 160-meter perimeter around the project boundary are discussed below under "Vicinity Sites and Isolates" because such resources could be impacted by the project and may account for the presence of isolated non-site cultural entities found on the parcel. Recorded cultural resources within a 1.6-kilometer radius of the center of the project area are listed in Table A-2a and on the project summary form.

NOTE: Maps and tables with resource specific location information are redacted in reports routed to an agency through a third party in accordance with the ASM Archaeological Records Use Agreement. Please see the "information disclosure notice" paragraph following the literature cited section of this report for more information.

Methods.

The fieldwork consisted of intensive on-foot coverage of the property by our staff in order to identify and locate any cultural resources, historic or prehistoric, within the property boundaries. Field personnel (D. Stephen) were spaced approximately 20 meters apart and crossed the study area in a series of contiguous corridors with any areas of extreme slope covered less intensively. Survey transects paralleled the longest dimension of the property except when prevented by the landform, vegetation density or hydrological features. Unless noted otherwise, the transect count is the quotient of the transect extent and parcel width. General conditions were excellent for conducting the fieldwork. Ground visibility was severely affected by the presence of trees, shrubs, semi-shrubs, succulents and grasses. Most of the parcel was dense riparian vegetation that greatly reduced observing the ground. The original landform was moderately disturbed by modern alterations to the ground surface.

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Survey Results.

The information derived from the fieldwork is generally in keeping with the expectations generated from archival and literature sources. There were no surface indications of archaeological resources within the study area which meet the Arizona State Museum minimum standard for recording as an archaeological site or that would be eligible for inclusion in the National Register of Historic Places.

Vicinity Sites, Isolates and Modern Features.

Vicinity Sites. Cultural resources that are located close to the study area (within roughly 160 meters or a 0.10 mile perimeter) are considered vicinity sites and are noted in the relevant tables and discussed when appropriate in this section. Recorded sites further away but in the general area (within a one-mile perimeter) are summarized in the relevant tables (see PAST Summary Form and Appendix Table A-2a for site numbers). According to AZSITE the sites located within the 160 meter perimeter are two linear sites, both transportation routes, old State Route 80 and Canada del Oro (AZ BB:9:17 & 41 both ASM) that appear to fall within the Oracle Road easement but do not encroach into the study area. AZ BB:9:142 (ASM) is an artifact scatter located over 200 meters northwest of the study area.

Isolates. The occurrence of isolated artifacts and non-site features in lower density than that required for formal recording as a cultural resource are documented below, in Figure 1 or in Table A-1 as appropriate. For this project a total of zero isolated artifacts or non-site features were noted and none deemed significant.

Modern Features. More recent cultural manifestations identified during the survey include dirt tracks, informal trails, fencing and a moderate density scatter of trash. All appear to be modern in origin.

Eligibility Evaluation.

No cultural resources were located during the course of the fieldwork in the project area appear to be more than 50 years old. Consequently it is not germane to assess significance under any of the criteria listed above.

Evaluation Of Effects Of The Proposed Project.

Considering the nature of the cultural resources found on the property, information collected about known sites in the area and the work already completed, indicates the development of the inspected parcel will not have a negative impact on important cultural resources within or in close proximity to the study area.

Recommendations.

Based on the archival information, field methods, the observable surface indications and because none of the materials observed on the study area have potential to provide important archaeological or historical information beyond what was obtained for this project, P.A.S.T. supports approving the sponsor's application. Although P.A.S.T. does not endorse additional archaeological studies for this project, ground-disturbing activities on the property should not commence without authorization by the agency archaeologist(s).

There remains the possibility that ground-disturbing activities could reveal the presence of heretofore-undiscovered cultural resources. If such materials are discovered construction activities should stop. Consultation should be initiated with the

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appropriate agency archaeologist, and if applicable under ARS §41-841 *et seq.* the Arizona State Museum, to assess the potential significance of any materials unearthed. Under State law (ARS 41-§865 & §41-844) if human skeletal remains or funerary objects are discovered on either public or private lands the Arizona State Museum should be contacted immediately.

LITERATURE CITED

Arizona State Museum

1993 *Arizona State Museum Archaeological Site Recording Manual (Version 1.1)*. On file, Arizona State Museum. Tucson, Arizona.

AZSITE

2013 AZSITE: Arizona's Official Statewide Cultural Resource Inventory. Database and mapping application with information derived from the Arizona State Museum site files and archival documents. University of Arizona, Tucson.

Curry and Jacob

1908 GLO Surveyor's Map for T11S R14E G&SRB&M. On file, Bureau of Land Management Regional Office. Phoenix, Arizona

National Park Service

1986 *How to Apply the National Register Criteria for Evaluation*. Department of the Interior. Copies available from Bulletin No. 16. National Register of Historic Places.

Turner, R. and D. Brown

1982 Sonoran Desertscrub. In *Biotic Communities of the American Southwest - United States and Mexico*, edited by D. Brown, pp. 118-121. University of Arizona for Boyce Thompson Southwestern Arboretum, Superior, Arizona.

NOTICES, DISCLOSURES AND CONFIDENTIALITY

NOTE FOR A.D.O.T. INVOLVED PROJECTS: If previously unidentified cultural resources are encountered during activity related to the use of this source, the contractor shall stop work immediately at that location and shall take all reasonable steps to secure the preservation of those resources. The Engineer will contact the A.D.O.T. Environmental Planning Group, Historic Preservation Team at 602.712.7767 and make arrangements for the proper treatment of those resources.

INFORMATION DISCLOSURE NOTICE: P.A.S.T. is a holder of an Arizona Antiquity Permit and a signatory to the "ASM Archaeological Records Use Agreement". As such, in compliance with the associated conditions and regulations of these documents, P.A.S.T. is bound "not to distribute or disclose specific site location information in a public document or make this information available to unauthorized individuals". P.A.S.T. reports are often initiated through third parties, who are not authorized to access this information. Consequently such information is presented herein in a manner deemed appropriate not to compromise site location or divulge potentially identifying site attribute information. P.A.S.T. reports are further structured to restrict the dissemination of such information through the removal of Appendix "A" as well as any maps of archaeological sites included in the document prior to wider distribution of the report.

P.A.S.T. will readily provide further or more specific site location, eligibility or site attribute information to a qualified individual when that person makes a request in writing or via email directly to P.A.S.T. That request must be supported with written concurrence from the agency lead archaeologist and either the SHPO, Director of the Arizona State Museum or their authorized designee(s) if the requestor does not hold a valid Arizona Antiquity Permit or has not executed the aforementioned ASM records use agreement.

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