

# LINCOLN PARK NEW SOFTBALL COMPLEX

## MASTER PLAN

*Prepared for:*



**CITY OF TUCSON PARKS AND RECREATION**

900 S. Randolph Way  
Tucson, AZ 85716



**WESTLAND RESOURCES, INC.**

4001 E. Paradise Falls Drive  
Tucson, Arizona 85712

**August 2008**  
Project No. 1009.16

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## OVERVIEW

The City of Tucson Parks and Recreation contracted with WestLand Resources, Inc. (WestLand) to prepare a Master Plan for a new softball fourplex to be constructed within the Lincoln Park boundaries. The new facility is proposed to be located east of Santa Rita High School and north of the already developed parts of the park.

WestLand's Master Planning process included the following phases:

1. Perform site analysis
2. Define opportunities and constraints
3. Prepare conceptual alternatives
4. Select preferred alternative
5. Develop Master Plan
6. Present to public and solicit input
7. Finalize Master Plan and develop preliminary opinion of probable cost.

## SITE ANALYSIS

### INTRODUCTION

Abraham Lincoln Regional Park is located at 8280 E. Escalante Road and is bounded by Camino Seco, Irvington, Pantano and Escalante roads in the southeastern quadrant of the City of Tucson. The park is surrounded by residential development on three sides. The Davis Monthan Air Force 'boneyard' is to the south.

Current facilities within the park boundary include the William Clements Center, which consists of a neighborhood center, swimming pool, covered outdoor basketball courts, gymnasium, and the Ward IV City Council Office. Also located within the park boundaries are the Fred Enke Golf Course and driving range, four competition-level softball fields, two soccer fields, the Atterbury Wash Bird and Animal Sanctuary, and the Lower Lincoln Park play and picnic area. The Lincoln Park Special events Area is anticipated to begin construction soon and will include an amphitheater and gazebo. Adjacent to the park is Pima Community College East and Santa Rita High School. Approximately 20 percent of the total park area is undeveloped, of which approximately 60 percent is designated to remain undeveloped as a Protected Natural Area as described by the *Abraham Lincoln Regional Park Master Plan Program Report Update, 2003*.

From the current level of demand for the existing facilities, it is clear that there is an immediate need for additional competition-level softball playing fields in this location. In order to address this demand, City of Tucson Parks and Recreation proposes to construct an additional softball facility within the park boundaries. Although this demand was not anticipated by the 2003 report cited above, the proposed facility will not intrude into the Protected Natural Area.

The purpose of this report is to provide an analysis of the proposed site for these additional facilities. It will address impacts to existing vegetation and riparian areas, existing topography and drainage, existing utilities, access, circulation, and views. (All site analysis graphics and site photos are included in the Appendix.)

### SITE CONTEXT

As shown in Figure 1, the proposed study area is zoned SR (Suburban Ranch) and is adjacent to Santa Rita High School to the west. The east side of the site is bounded by a tributary of Atterbury Wash. Atterbury is a W.A.S.H. ordinance drainage and its tributaries are classified as proposed W.A.S.H. ordinance drainages. The implication for any disturbance of these washes is discussed in greater detail below.

## **RIPARIAN HABITAT AND MITIGATION**

As shown in Figure 2, Lincoln Park is divided by several washes. The Pima County MapGuide website identifies the Atterbury Wash as an “Important Riparian Area”. The Atterbury Wash tributary to the east of the project area is identified as Xeroriparian C habitat. The Kinnison tributary to the west of the project is designated as Xeroriparian B habitat. These areas are not identified as Critical and Sensitive Habitat on the MapGuide website. However, both habitat types require delineation of the 100-year floodplain and an Environmental Resource Report and Mitigation Plan to address the disturbance of protected native plants within the floodplain. Mitigation requirements for riparian habitats are more stringent than the Native Plant Preservation Ordinance.

In addition to the Environmental Resource Report and Mitigation Plan, a Native Plant Preservation Plan will be required for all areas outside of the floodplain.

## **EXISTING NATIVE VEGETATION**

Vegetation on the site is shown in Figure 3 and is consistent with the Arizona Upland subdivision of the Sonoran Desert plant community types. Tree species consist of mesquites and blue and foothills palo verde. The site is also populated with scattered barrel and prickly pear cacti; some areas consist of nearly pure stands of prickly pear, creosotebush and cholla. More dense stands of mesquite and blue palo verde occur near washes where whitethorn acacia is the dominant shrub species.

## **TOPOGRAPHY AND DRAINAGE**

The topography of the study area generally slopes from southwest to northeast, draining toward Atterbury Wash (see Figure 4). The southwest and south-central areas of the site are generally flat while the northeast area has the greatest grade changes. A slight ridge trends diagonally across the site and is drained by a series of small washes that feed into Atterbury Wash. There are approximately 30 feet of elevation change across the study area.

## **UTILITIES (SEE FIGURE 5)**

**Sewer:** Pima County Wastewater maintains an existing 8-inch sewer line that flows from west to east (plan # G-80-11). Its depth is approximately 15 feet below existing grade.

**Water:** Tucson Water maintains 12-inch and 8-inch reclaimed water lines within or near the study area. Estimated available pressure for reclaimed water in this area is 45 to 55 pounds per square inch (psi). The estimated flow for a two-inch meter is 40 gallons per minute (gpm). The 12-inch line currently serves irrigation needs for the Fred Enke Golf Course. Preliminary discussions with Tucson Water indicate that the 12-inch line has sufficient capacity to serve both the golf course and the proposed ball fields, based on a

peak daily demand of 150 to 200 gpm and 70,000 to 80,000 gallons per day for the ball fields.

Potable waterlines include 16-inch and 6-inch lines on the north and south sides of Escalante Road respectively and a 12-inch line on the west side of Pantano Road. Several private lines run through Lincoln Park to serve existing restrooms and drinking fountains, but a new source of potable water for this project is recommended. Estimated pressure and volume for potable water in this area is approximately 54-61 psi and 54-61 gpm.

**Electric:** Tucson Electric maintains phase three overhead lines as well as an underground phase three. Phase three overhead power lines are also located adjacent to Escalante Road. There is electrical service to all of the surrounding parcels.

**Gas:** Southwest Gas maintains a 4-inch steel pipe within the Escalante Road right of way. There is a 2-inch service line to the William H. Clements Center.

**Telephone** Qwest maintains phone service in the area.

## **ACCESS AND CIRCULATION**

Access to the fields can be gained through the existing entry road and parking lot east of Pantano Road (see Figure 6). An existing dirt road there parallels the reclaimed water line and crosses the Atterbury tributary drainage.

Initial discussions with City of Tucson Traffic Engineering indicate that access from the north would best be located opposite Manitoba Avenue, where there already exists an opening in the Escalante Road median. Left and right turn bays will probably be required there. A Traffic Statement, rather than a full Traffic Report, may be sufficient for this project.

## **VIEWS** (refer to Figure 7 for locations of photos)

Views from the site:

- The study area is generally at a higher elevation than adjacent properties, allowing views to the Catalina and Rincon Mountains to the north and east respectively. The Santa Rita Mountains to the south are slightly visible, mostly obscured by existing vegetation and increasing elevation to the south.
- The existing field lights at Santa Rita High School are slightly visible.

Views to the Site:

- Views to the study area from Lincoln Ridge Estates and the Lower Lincoln Park play and picnic area near Atterbury Wash are obscured by topography and dense vegetation (see photos #12 and #14).
- Existing park facilities to the south of the site have limited views of the study area (see photos #15 and #16).
- Views from west of the site are obstructed by Santa Rita High School.
- The proposed new amphitheater facility includes a new gazebo designed to take advantage of views to the Catalina Mountains to the north and northeast. The study area lies within a portion of this viewshed.

## SUMMARY: OPPORTUNITIES, CONSTRAINTS AND LOCAL SUPPORT

The study area offers a number of promising opportunities for the development of a new facility as well as some constraints. Both are outlined below:

### OPPORTUNITIES

- Impacts to the local residential neighborhoods from increased traffic and night lighting are minimized due to the location of the study area.
- All required utilities are fairly close for inexpensive access and there is three-phase power to the site. Proposed improvements will avoid all major utilities.
- Reclaimed water is available near the project for irrigation.
- Numerous other public facilities are located nearby:
  - Lincoln Park will be one terminus for the Atterbury Wash Greenway currently under design.
  - Lincoln Park itself offers a number of other facilities as discussed earlier. The addition of these fields will further identify Lincoln Park as a regional destination that can be accessed by cars, bicycles, and pedestrians.
  - It may be possible to link this new facility to the existing play fields at Santa Rita High School.
- The proposed plans are consistent with the *Abraham Lincoln Regional Park Master Plan Program Report Update, 2003*.
- There is also the possibility to link this new facility with the adjacent Santa Rita High School Fields to the west.

### CONSTRAINTS

- The study area could possibly impact two riparian areas. Disturbances to these areas will require more stringent mitigation measures and the preparation of an Environmental Resource Report. It will be critical to determine the location of the 100-year flood plain early in the design process. It will also be important that the design remain clear of these areas where possible.
- As described by the *Abraham Lincoln Regional Park Master Plan Program Report Update*, the area east of the Atterbury Wash tributary is defined as a Protected Natural Area. Therefore, development in this area is restricted.
- Access from Pantano Road to the west will require redesign and reconstruction of the existing parking area. This route will also cross the Kinneson Wash Tributary and its associated riparian area, thereby necessitating a drainage study and the design and construction of a culvert crossing.
- Linkages between the proposed facility and the existing softball complex will be important. Therefore, a shared-use asphalt path has been included to address this consideration. As shown in

the Master Plan, this path will cross the Kinneson Wash Tributary and riparian area, thereby triggering the need for a drainage study and the design and construction of a wash crossing.

- Views from existing and planned facilities to the south of the study area may be slightly obstructed by field lighting.
- Although reclaimed water will be available, the existing pump will require upgrading in order to increase the amount of water that can be applied to both the existing and proposed play fields.
- In general, topography in the south and southwest portions of the site is more gentle and easier for development of baseball facilities. The north and northeast portions of the site have steeper slopes and more drainages; therefore, development there will be more costly.

## LOCAL SUPPORT

The proposed design was presented to the local neighborhood the evening of May 29, 2008 and was met with general approval. One request was made to include some form of fencing to restrict off-road vehicular traffic through the Atterbury Wash tributary and the Protected Natural Area.

## CONCEPTUAL ALTERNATIVES

### Concept 1:

This concept shows the configuration selected by the City as the preferred alternative. It allows for future development to the north. The primary difference between this the final concept is the size of the Phase I parking area.

### Concept 2:

Concept 2 shows the facility at a more southern location to take advantage of level ground there. Note that this design impacts the viewshed of the future Special Events Center to the south.

### Concept 3:

The concept shows the facility at a more northern location to gain greater separation from the future Special Events Center. The challenge to this design is the rougher terrain in this area, which requires more grading.

After meeting with City Parks and Recreation design, management, and maintenance staff, Concept 1 was selected for further development and will be discussed in greater detail later in this report.

## MASTER PLAN

The Master Plan offers the following features:

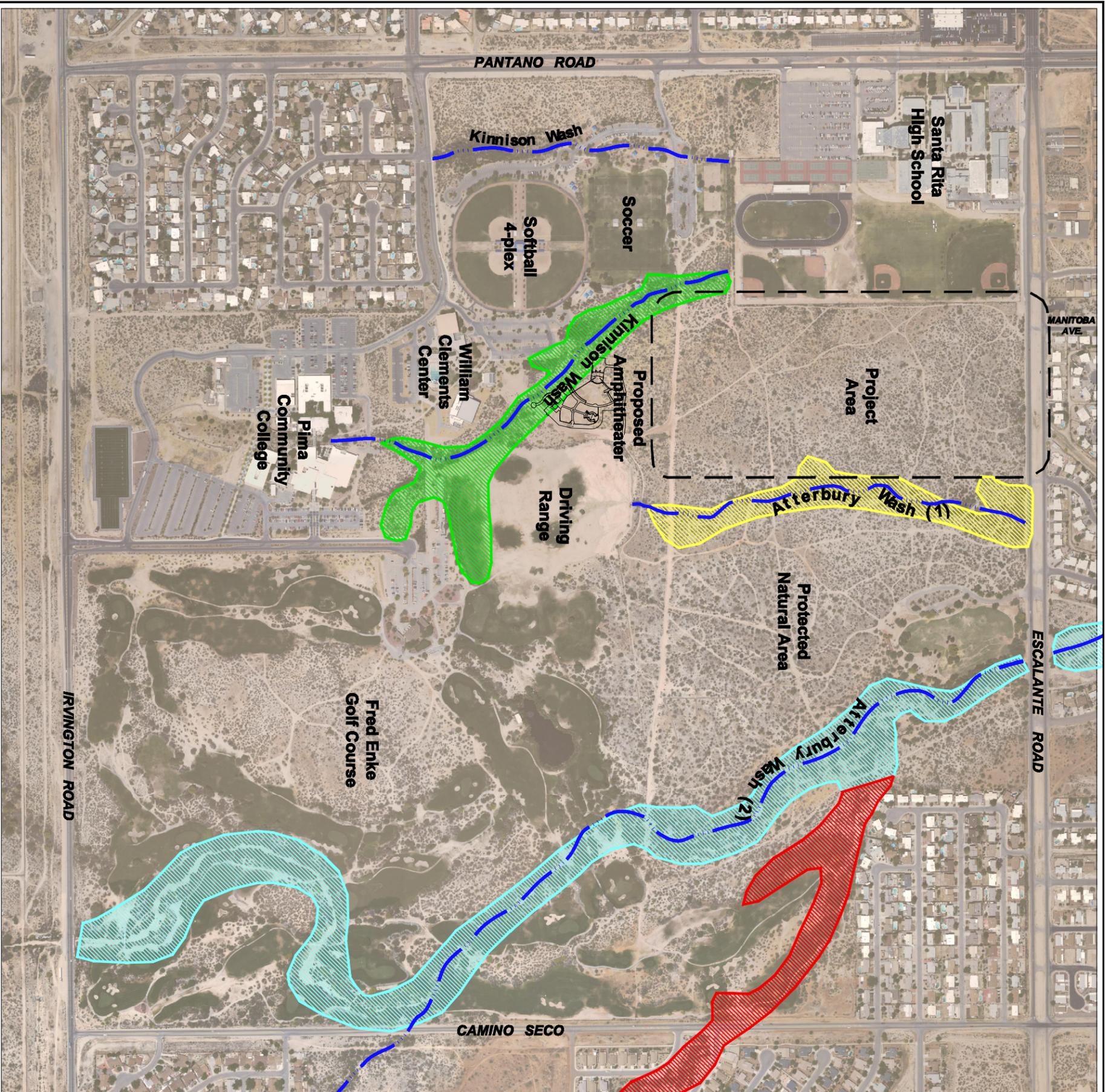
- Vehicular, bicycle and pedestrian access from Escalante Road, which requires some improvements to accommodate park traffic.
- Sufficient parking for both Phase I and Phase II playing fields.
- A drop-off area for safe and convenient access.
- Walking paths that connect to both existing and proposed trails in Lincoln Park.
- A paved multi-use path that connects to the existing Lincoln Park baseball facility.
- Post-and-cable fencing at the proposed eastern edge of development to restrict illegal access to Atterbury Wash Tributary.
- Close proximity to Santa Rita High School's athletic fields, thereby facilitating possible shared uses and minimizing impacts to the surrounding areas.
- A centrally-located concession stand that also provides restrooms and serves as a storage facility.
- A centrally-located, secured maintenance yard.
- Warm-up areas for teams scheduled to play.
- The design allows for future expansion (Phase II) without compromising the recommendations put forth in the 2003 *Abraham Lincoln Regional Park Master Plan Program Report Update*.
- The design requires minimal impacts to the adjacent Atterbury Wash Tributary.

In order to proceed with the next stages of design, the following studies will be required:

- Survey
- Geotechnical investigation
- Hydrology report
- Environmental Resource Report (if 100-year floodplain is affected)
- Cactus Ferruginous Pygmy-Owl survey (pending review by United States Fish and Wildlife Service)
- Native Plant Preservation Plan
- Traffic Statement

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## **FIGURES**

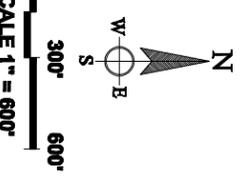


- Legend**
- ▨ Important Riparian Area
  - ▨ Xeroriparian A
  - ▨ Xeroriparian B
  - ▨ Xeroriparian C
  - Proposed City W.A.S.H.

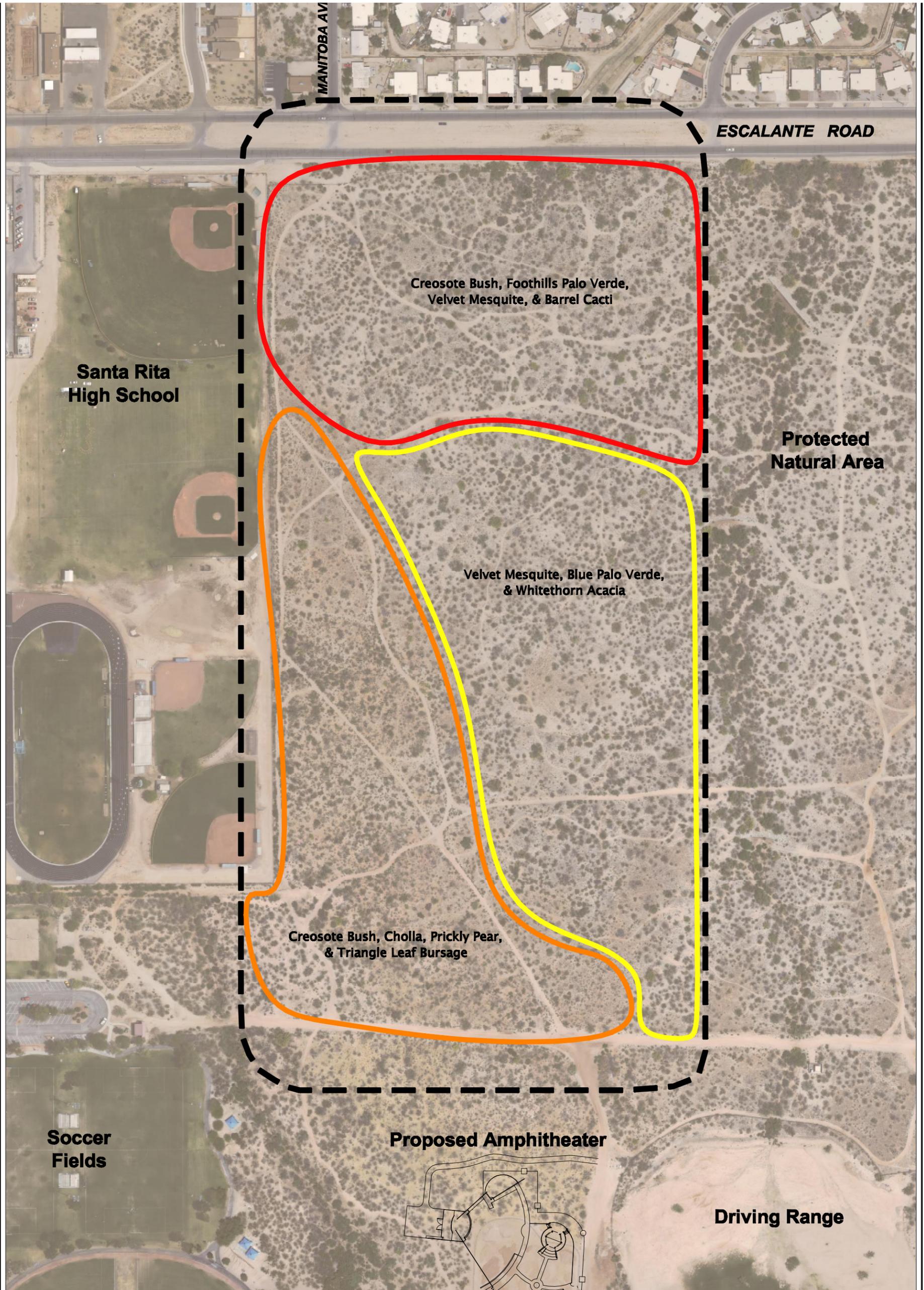
- Notes:**
1. Atterbury Wash Tributary (1) (Proposed W.A.S.H. Ordinance Wash)
  2. Atterbury Wash Tributary (2) (2000-5000 cfs) (Proposed W.A.S.H. Ordinance Wash)
  3. Kinnison Wash Tributary (Proposed W.A.S.H. Ordinance Wash)

T.14S., R.15E., Portion Section 33  
 Pima County, Arizona  
 Photo Source: Pima Association of Governments  
 Photo Date: 2005  
 Map Data: Pima County Map Guide

**Westland Resources Inc.**  
 Engineering and Environmental Consultants  
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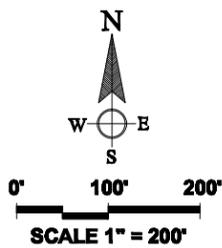


LINCOLN PARK  
 SOFTBALL COMPLEX  
 Riparian Habitat and W.A.S.H  
 Ordinance Washes  
 Figure 2



T.14S., R.15E., Portion Section 33  
 Pima County, Arizona  
 Photo Source: Pima Association of Governments  
 Photo Date: 2005

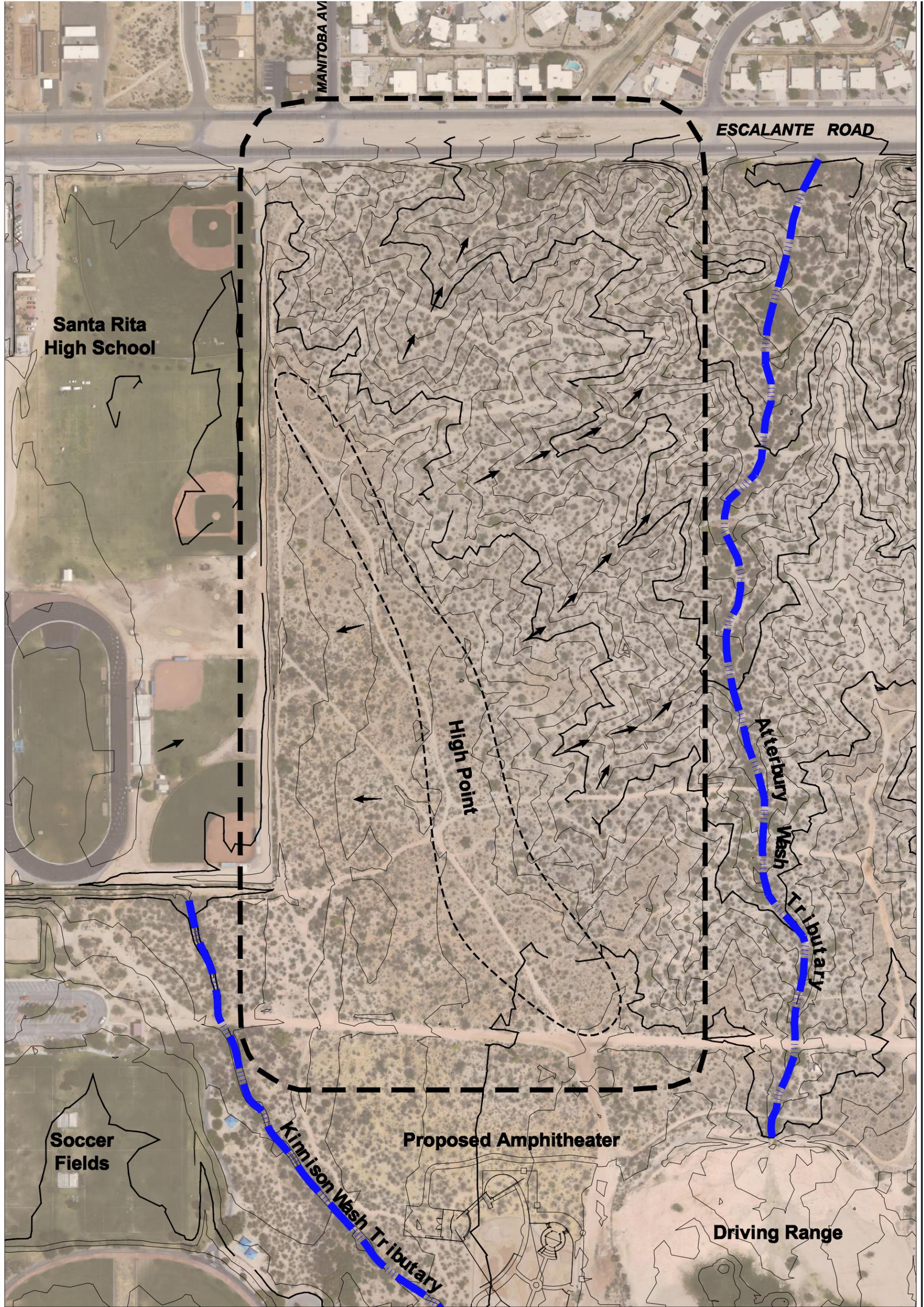
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**LINCOLN PARK  
 SOFTBALL COMPLEX**

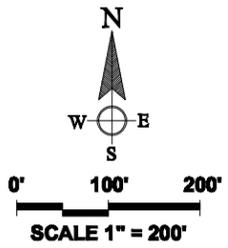
Vegetation

Figure 3



T.14S., R.15E., Portion Section 33  
 Pima County, Arizona  
 Photo Source: Pima Association of Governments  
 Photo Date: 2005

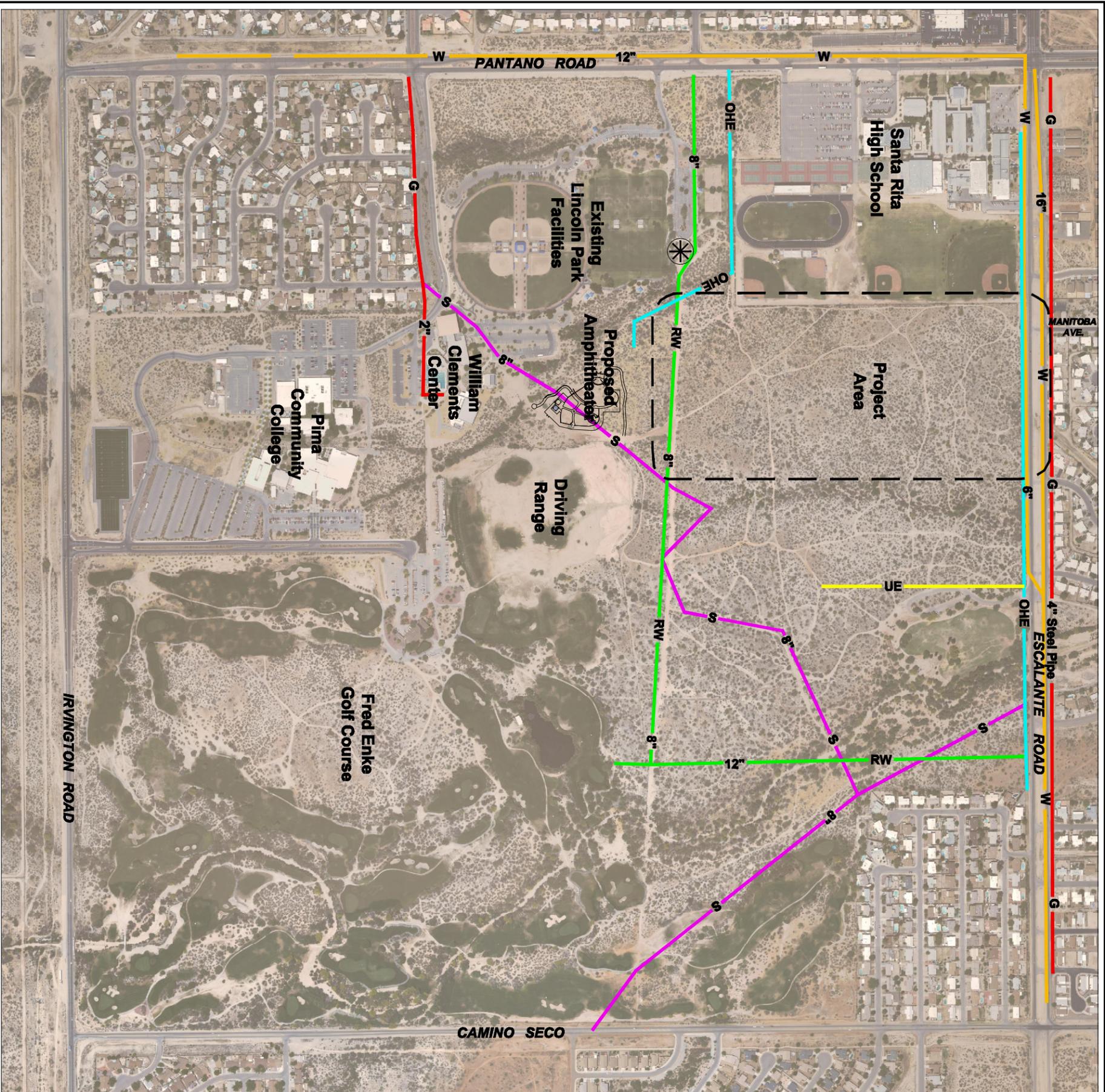
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- Legend**
- Project Area
  - Wash
  - Drainage Flow
- Contour Interval: 2 Feet

**LINCOLN PARK  
 SOFTBALL COMPLEX**  
 Topology and Drainage  
 Figure 4

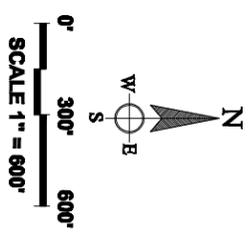
M:\projects\1009.16\lands\Site analysis figures.dwg



- Legend**
- Project Area
  - S Pima County Wastewater Sewerline
  - RW Reclaimed Waterline
  - G Southwest Gas
  - OE Tucson Electric (Overhead)
  - UE Tucson Electric (Underground)
  - W Potable Waterline
  - ⊛ Existing Irrigation Booster

T.14S, R.15E, Portion Section 33  
 Pima County, Arizona  
 Photo Source: Pima Association of Governments  
 Photo Date: 2005

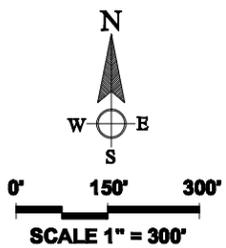
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T.14S., R.15E., Portion Section 33  
 Pima County, Arizona  
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 Photo Date: 2005

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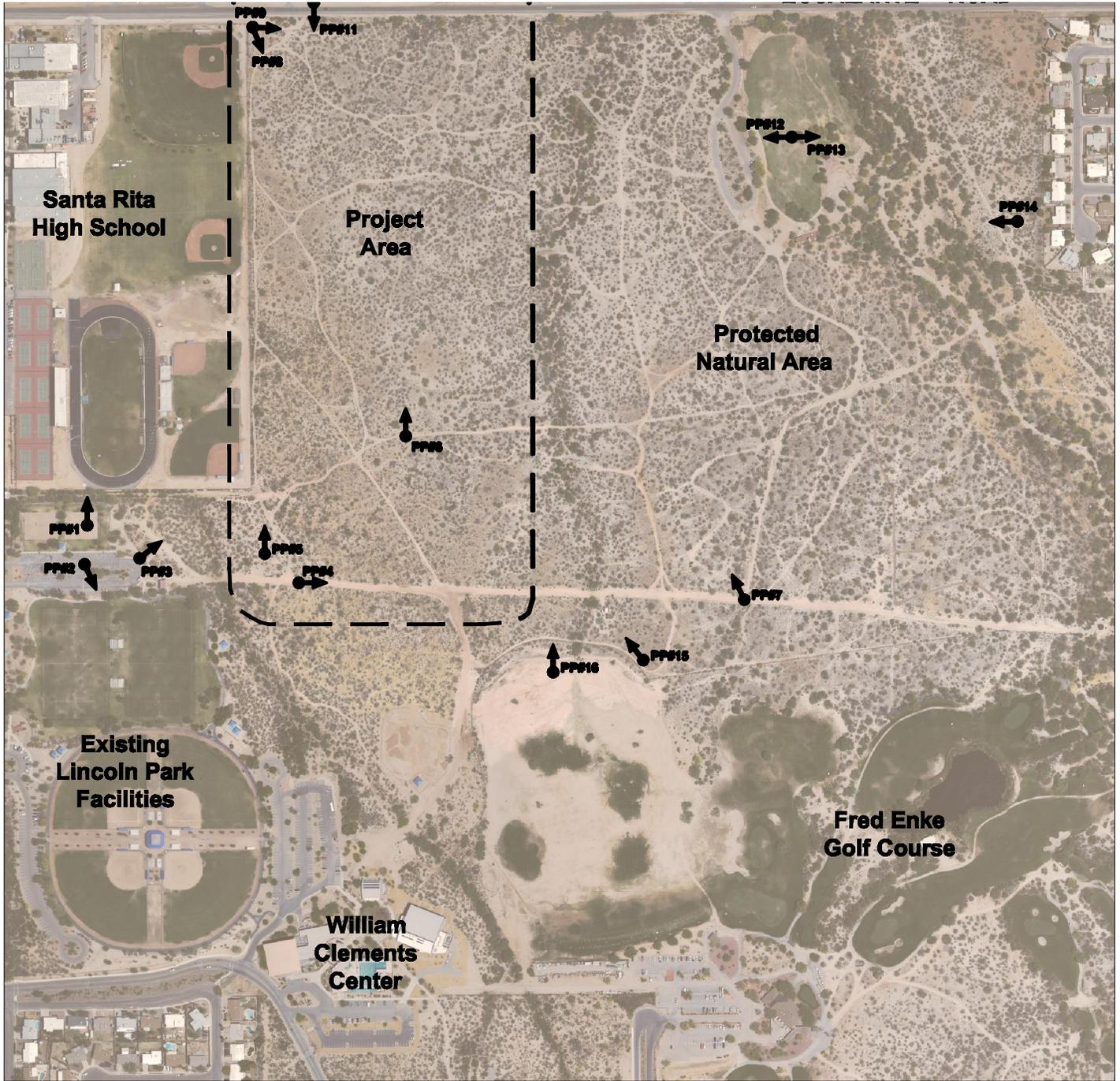
**Legend**

- Project Area
- Proposed Access Road
- Existing Pedestrian Path
- Possible Pedestrian Path

**LINCOLN PARK  
 SOFTBALL COMPLEX**

Access

Figure 6

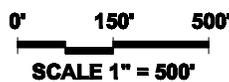


T.14S., R.15E., Portion Section 33  
 Pima County, Arizona  
 Photo Source: Pima Association of Governments  
 Photo Date: 2005

**Legend**

-  Project Area
-  Photo Point and Direction

See Photo Sheets



**LINCOLN PARK  
 SOFTBALL COMPLEX**

Views  
 Figure 7

  
**WestLand Resources Inc.**  
 Engineering and Environmental Consultants  
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 Tucson, Az 85712 (520) 206-9585



Photo Point 1.  
Looking north from parking  
area toward Santa Rita  
High School



Photo Point 2.  
Looking south from parking  
area toward existing  
athletic fields.



Photo Point 3.  
Looking northeast toward  
study area.



Photo Point 4.  
Looking east down existing  
dirt road.



Photo Point 5.  
Looking north across  
project site toward Santa  
Catalina Mountains.



Photo Point 6.  
Looking north across  
project site toward Santa  
Catalina Mountains.



Photo Point 7.  
Looking northwest study  
area.



Photo Point 8.  
Looking southeast from  
northeast corner of Santa  
Rita High School property.



Photo Point 9.  
Looking east from north-east corner of Santa Rita High School property toward Rincon Mountains.



Photo Point 10.  
Looking north across Escalante Road to subdivision north of project site on Escalante Road.



Photo Point 11  
Looking south from  
subdivision north of project  
site.



Photo Point 12.  
Looking west from existing  
picnic area.



Photo Point 13  
Looking east from existing  
picnic area toward  
Atterbury Wash.



Photo Point 14.  
Looking west from  
subdivision to east of  
project site.



Photo Point 15  
Looking northwest from  
driving range toward Santa  
Rita High School.

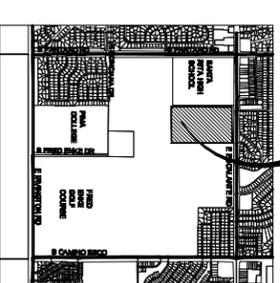


Photo Point 16.  
Looking toward study area  
from existing driving range.

---

**PLANS**

THIS PROJECT



LOCATION MAP  
T-14-S, R-15-E, SEC. 33, G435W  
Pima County, Arizona  
3" = 1 MILE

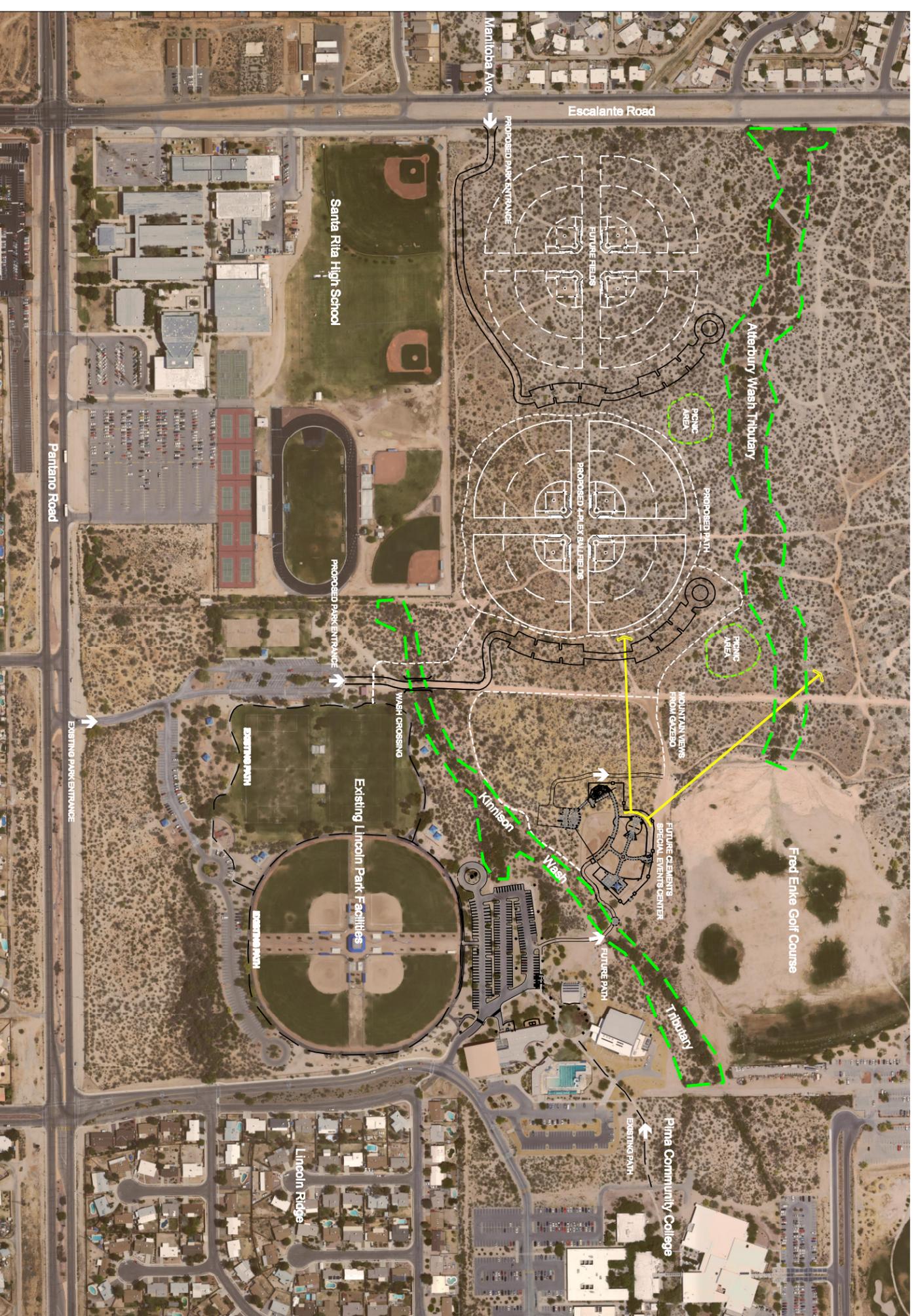
## Notes

- 1 Adult League Softball fields 300' from home plate to fence
- 2 Roads have 24' right-of-way
- 3 Kinnison and Atterbury Wash tributaries are proposed W.A.S.H. Ordinance washes.
- 4 Concession stand is in the center of 4-plex.



Existing path

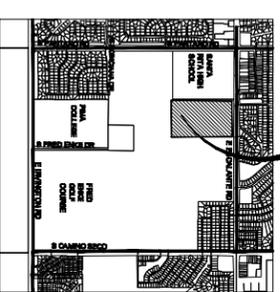
Proposed path



# Lincoln Park Softball Complex

## Schematic Master Plan- Concept 1

THIS PROJECT



LOCATION MAP  
T-14-S, R-15-E, SEC. 33 GDSNW  
Pima County, Arizona  
Scale: 1" = 1 MILE

## Notes

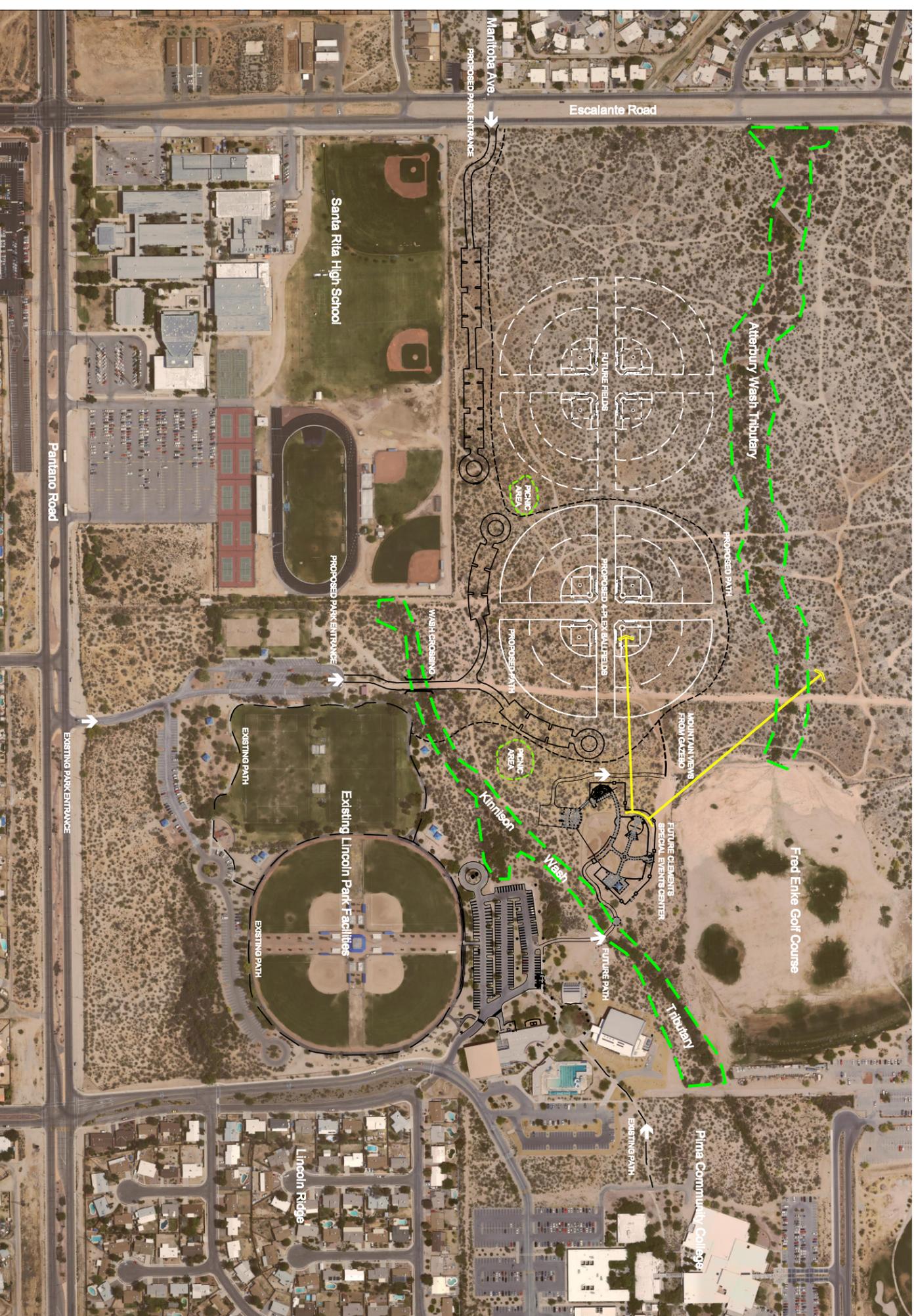
- 1 Adult League Softball fields 300' from home plate to fence
- 2 Roads have 24' right-of-way
- 3 Kinnison and Atterbury Wash tributaries are proposed W.A.S.H. Ordinance washes.
- 4 More fields oriented at the preferred north east orientation.
- 5 Less grade cut and fill.



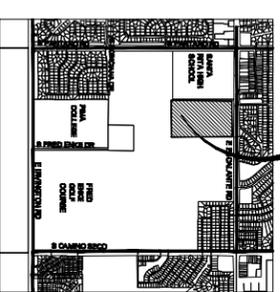
Existing path



Proposed path



THIS PROJECT



LOCATION MAP  
 T-14-S, R-15-E, SEC. 33 GASRW  
 Pima County, Arizona  
 1" = 1 MILE

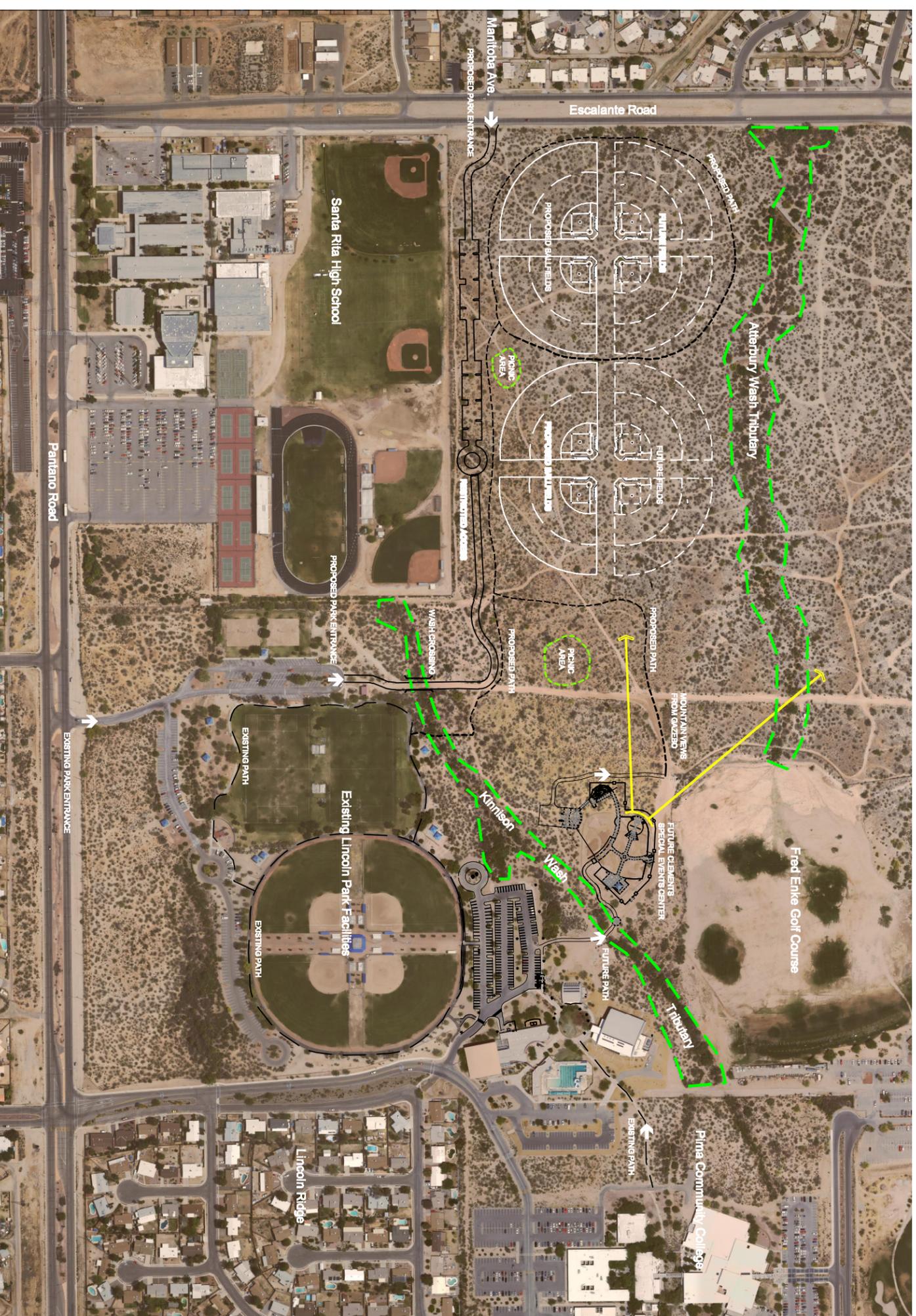
## Notes

- 1 Adult League Softball fields 300' from home plate to fence
- 2 Roads have 24' right-of-way
- 3 Kinnison and Atterbury Wash tributaries are proposed W.A.S.H. Ordinance washes.



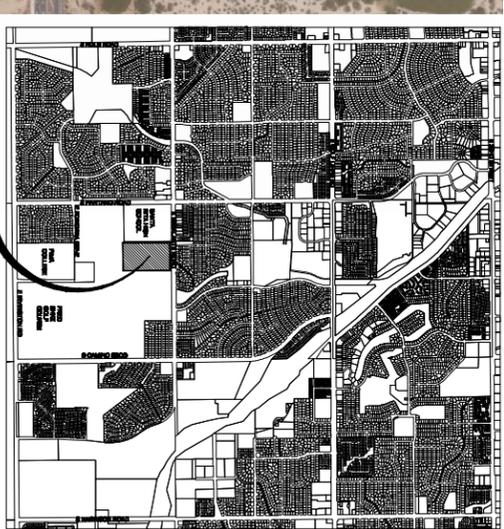
Existing path

Proposed path

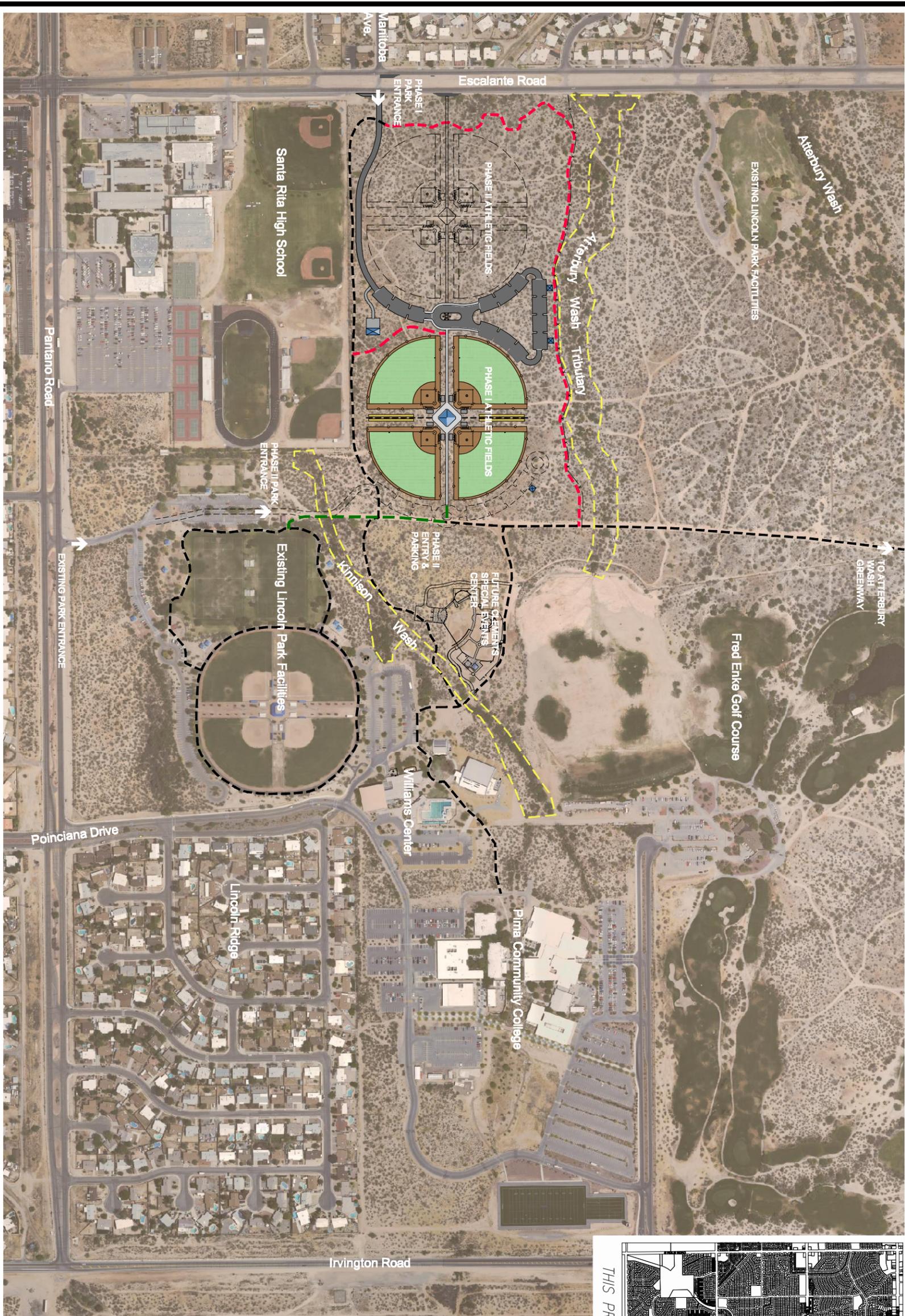


# Lincoln Park Softball Complex

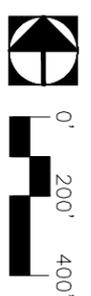
## Schematic Master Plan - Concept 3



LOCATION MAP  
 T-14-S-R-15-E-SEC 33 ORASM  
 Pima County, Arizona  
 2" = 1 MILE

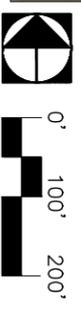
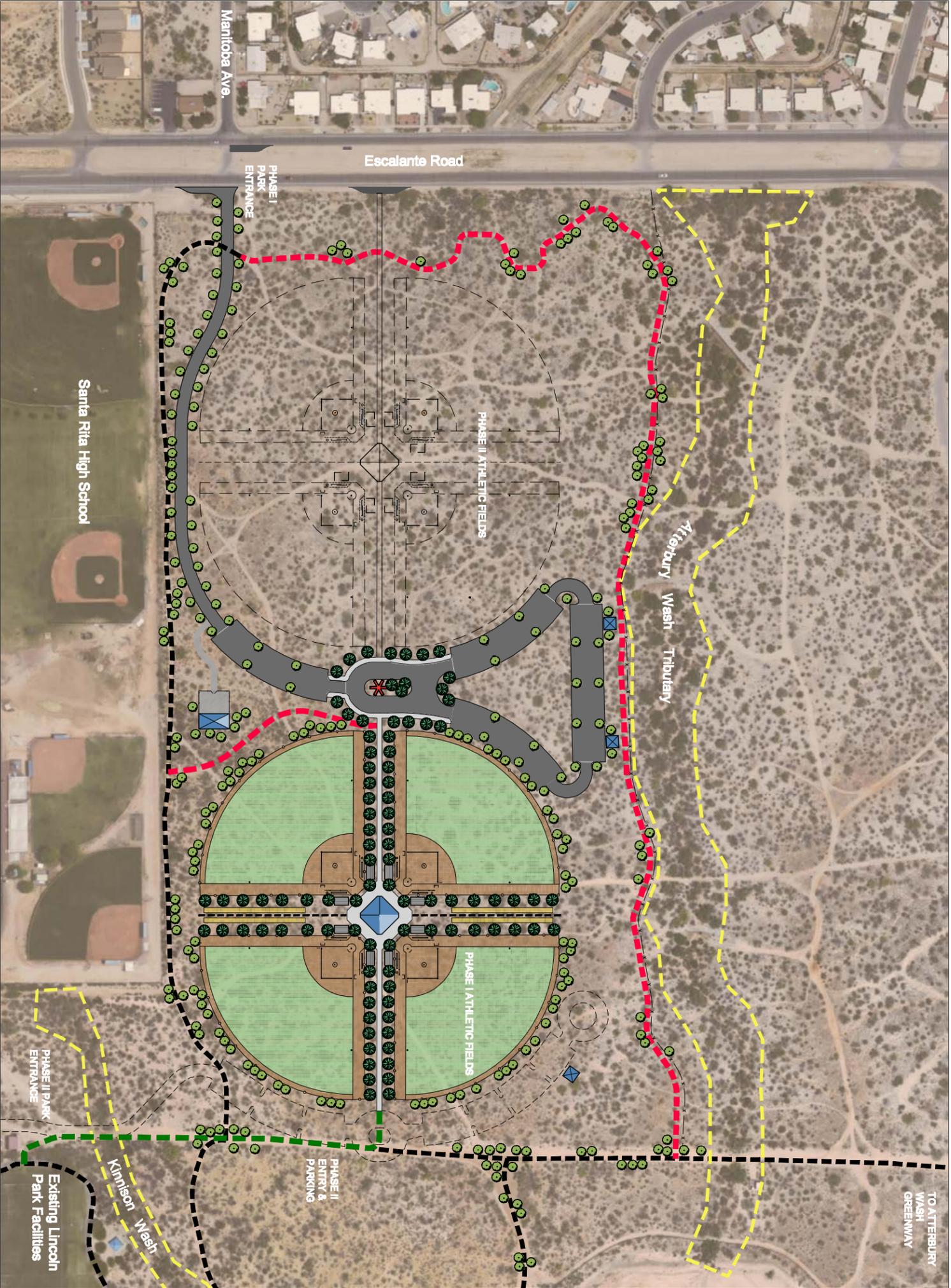


- Legend**
- Remuda
  - Bleachers
  - Concessions/Restrooms
  - Maintenance Yard, (30x30 enclosed building + 30x50 covered work area)
  - Proposed Unpaved Walking Path
  - Existing Walking Path
  - Proposed Paved Path
  - Paved entry roads & parking, New curbs & gutters to match existing.
  - Chain Link Fence
  - Post & Cable Barrier
  - Retaining Wall/ Slope
  - Approximate Limits Riparian Area
  - Warm-up Area



# Lincoln Park Softball Complex Master Plan





- Legend**
- Ramada
  - Bleachers
  - Concession/Restrooms
  - Maintenance Yard, (30x30 enclosed building + 30x50 covered work area.
  - Proposed Unpaved Walking Path
  - Existing Walking Path
  - Proposed Paved Path
  - Paved entry roads & parking. New curbs & gutters to match existing.
  - Chain Link Fence
  - Post & Cable Barrier
  - Retaining Wall/ Slope
  - Public Art
  - Approximate Limits Riparian Area
  - Warm-up Area
- NOTE:**  
1. Total number of parking spaces shown for Phase I = 208 spaces.

# Lincoln Park Softball Complex Site Plan