

PIONEER REGIONAL PARK

Prescott, Arizona

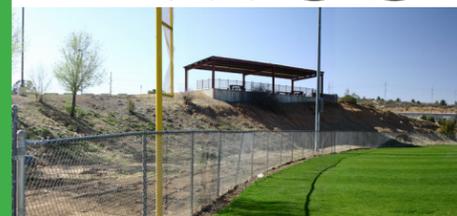


The Drachman Institute
University of Arizona College of
Architecture and Landscape Architecture

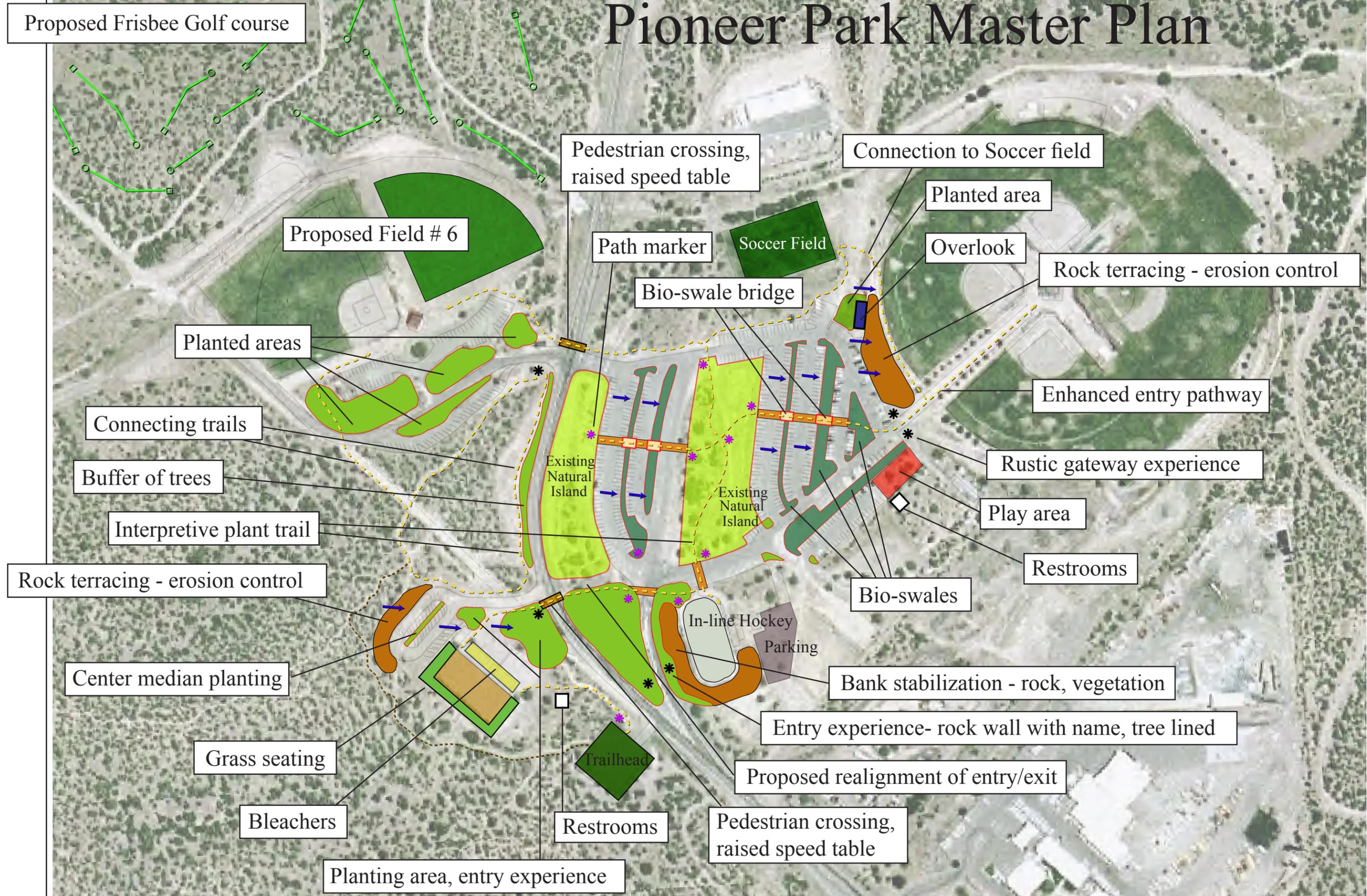
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...CONNECTING recreation through the Landscape



Pioneer Park Master Plan



INTRODUCTION

Pioneer Park is a wonderful regional park with many amenities but...



Suffers from poor circulation, lack of connection and cohesion between separate parts.

Large expanses of asphalt with drainage problems creating challenging maintenance problems and degradation of park facilities over time.

This plan proposes drainage solutions that will address many problems simultaneously and greatly contribute to the overall park experience.

Foot trails that connect separate pieces into a unified whole.

Safety improvements to reduce conflicts between vehicles and pedestrians.

Overall greening of the park with added vegetation designed to be sustained by rainfall, improving aesthetics as well as reducing maintenance requirements.

And an overall improvement of the entry experience into both the park as a whole and each of the individual recreation areas.

BIO-SWALES



- Rustic log gateway
- Bio-swale bridges
- Enhanced parking lot island with use of connecting trails.

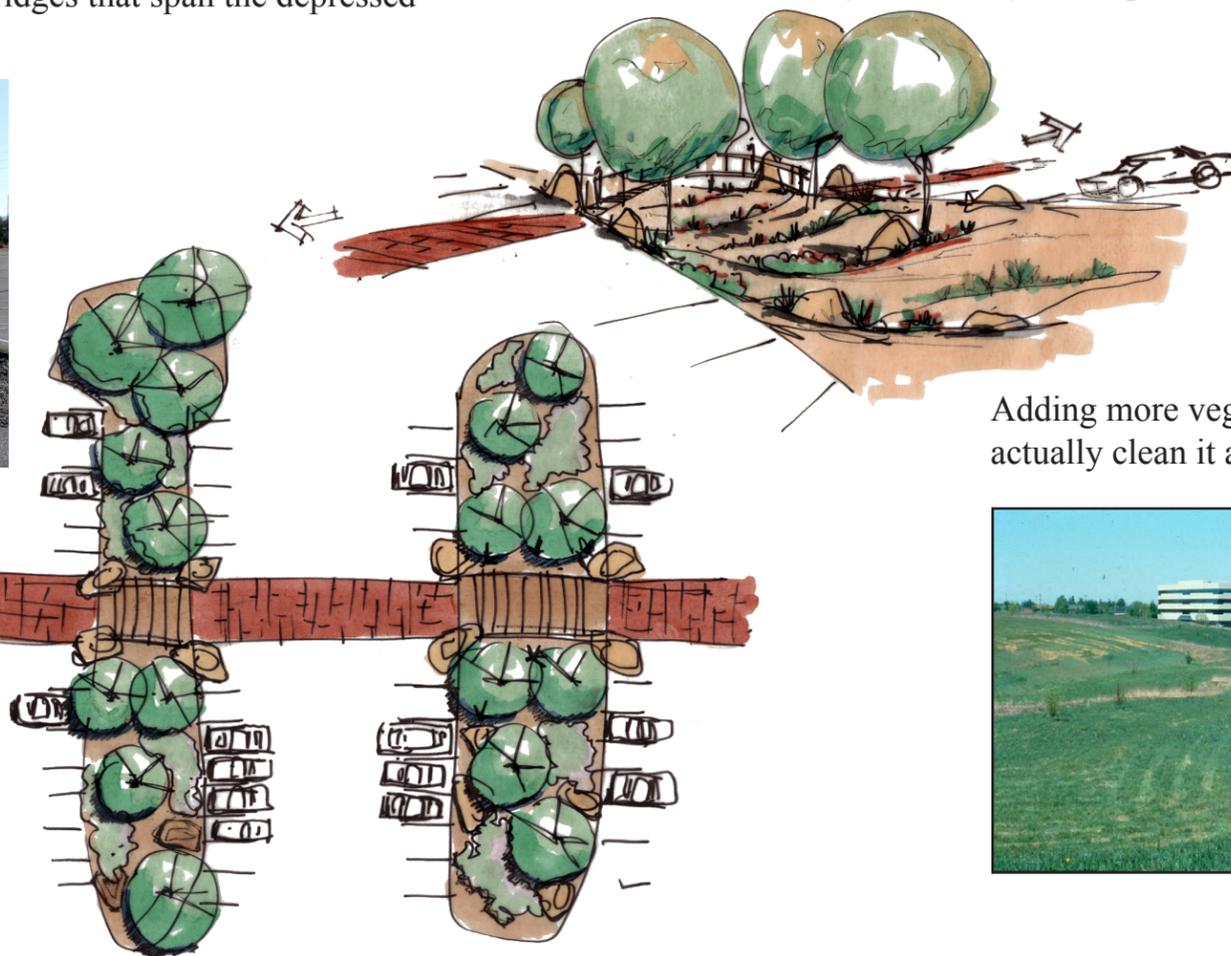


A series of water diverters (bio-swales) slow the movement of water and allow it to infiltrate into the soil rather than run off the site and not be captured in the soils. The goal should be to retain as much water as possible and with so much hardscape in the form of parking lots, a lot of water must be dealt with. It must be slowed through a series of filters which is what these rock walls provide.

Prescott's rock formations characterize and serve as landmarks for many areas within the town. These boulder formations create beautiful sculpted landscapes that are natural and reflect a sense of timelessness. Integrating the use of boulders to act as gateways, corner treatment, and wayfinding objects will enhance the connectivity and beauty of the park.



A designated pathway cuts through the parking lot, and provides direct access to the ball fields and also breaks up the large expanse of parking lot. To travel on foot from point A to B, you pass through a series of vegetated zones or bioswales and over four small rustic bridges that span the depressed cutouts in the parking lot.



Adding more vegetation, particularly grasses, can serve to filter runoff and actually clean it as it infiltrates through the soil.



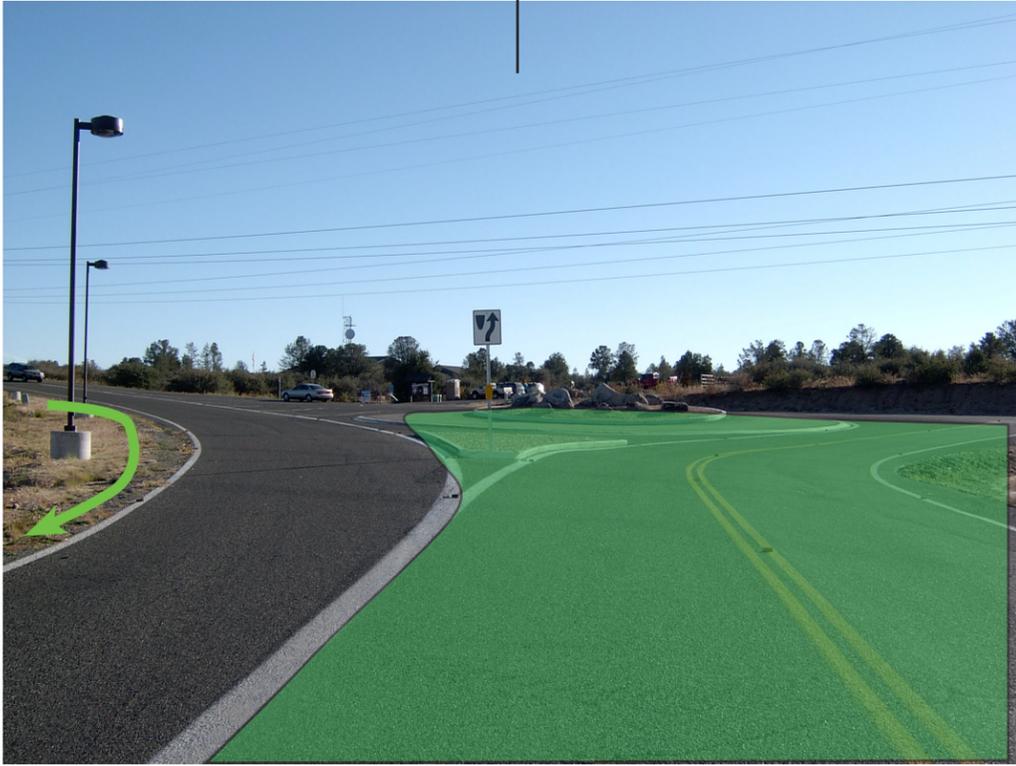
GATEWAYS



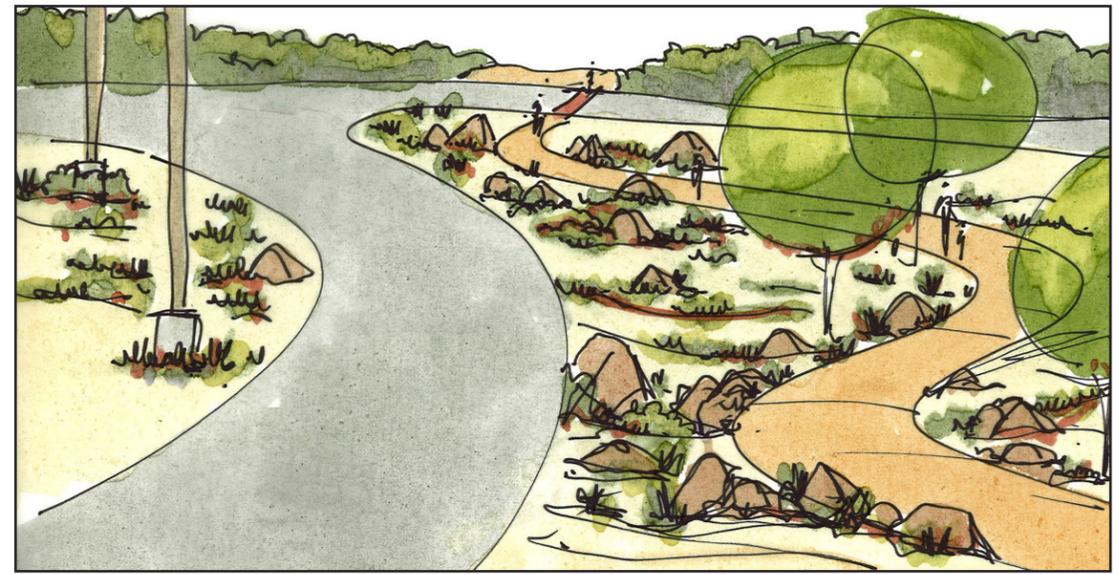
- This area is already a natural basin. Enhance with vegetation to further reduce effects of erosion.
- Place rock to beautify and stabilize this slope from erosion.
- Plant a flowing line of colorful maple trees to reinforce curve of the road into the main parking lot.

In-line hockey and entrance area

Removal of the exit lane onto Commerce Drive at the existing entry circle would be better served if moved to align with the entry point into the volleyball area. This would create a larger island area for landscaping (compared to the small concrete curbed circle) and create a stronger sense of entry into the main parking area.



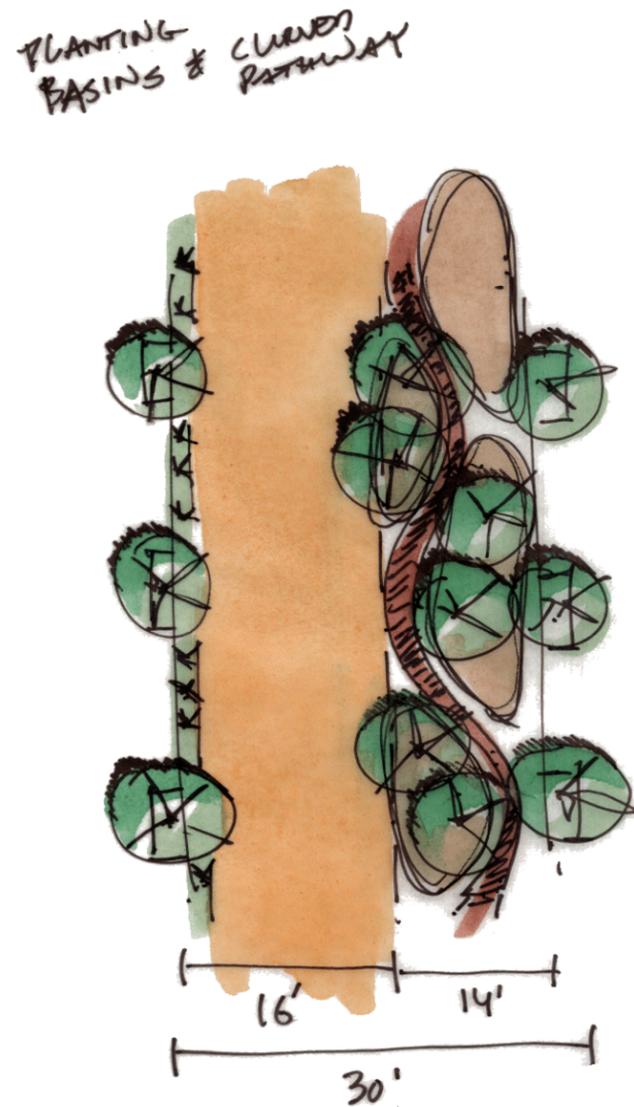
View looking from parking lot towards gateway circle and trailhead



A sketch showing how taking out the exit in this area and moving it to align with the volleyball entry point can provide opportunity for a more natural landscape compared to the superimposed circle.

GATEWAYS

To preserve access for large vehicles at least 12 feet should be preserved along this entry point to the ball fields. The existing entry, although lined with trees and rip rapped slopes, still feels like a road and not a pathway. It would be amazing to restore this very broad flat road into a heavily vegetated linear park of sorts with pathways cutting through it. Does a pedestrian want to enter on a road or a pathway?



Sketch of sharing a pathway with vehicular access road (not to scale).



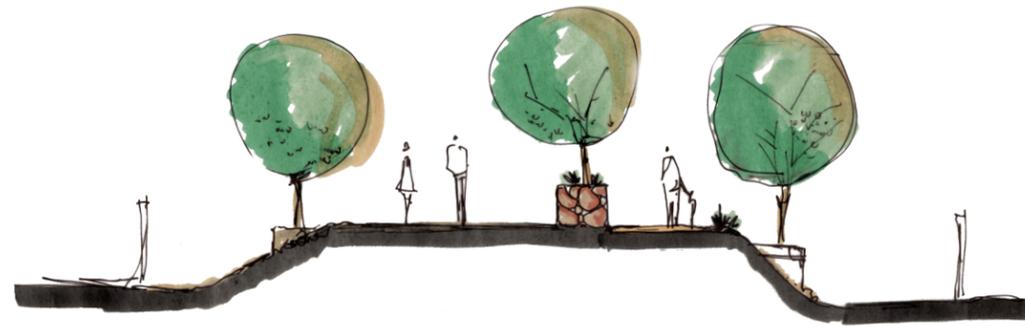
Stone and wood gateway into ball fields, with subtle reference to baseballs in the rockwork.

This concept divides the wide road into two parts essentially, one side feeling more pedestrian and interesting.

GATEWAYS



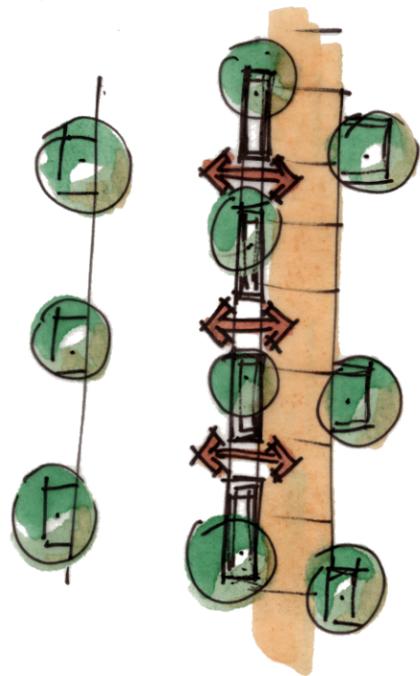
Proper sloping of walkways is essential to their longevity and reduces maintenance requirements.



This section shows the existing tree-lined road along the rip-rapped slope but also introduces a third alley of vegetation.

Dividing the entrance into a paved pathway (or soil pavement for easy handicapped access) still leaves approximately a 12 foot path, wide enough for vehicular access.

Considering that this is the main access corridor into one of the most popular areas within the park, the existing condition appears mostly uni-dimensional as it functions well to move people through, but offers little variety and interest in its experience as a gateway.



Openings in this planting area would allow for lateral movement anywhere along these pathways.



existing main access into baseball fields

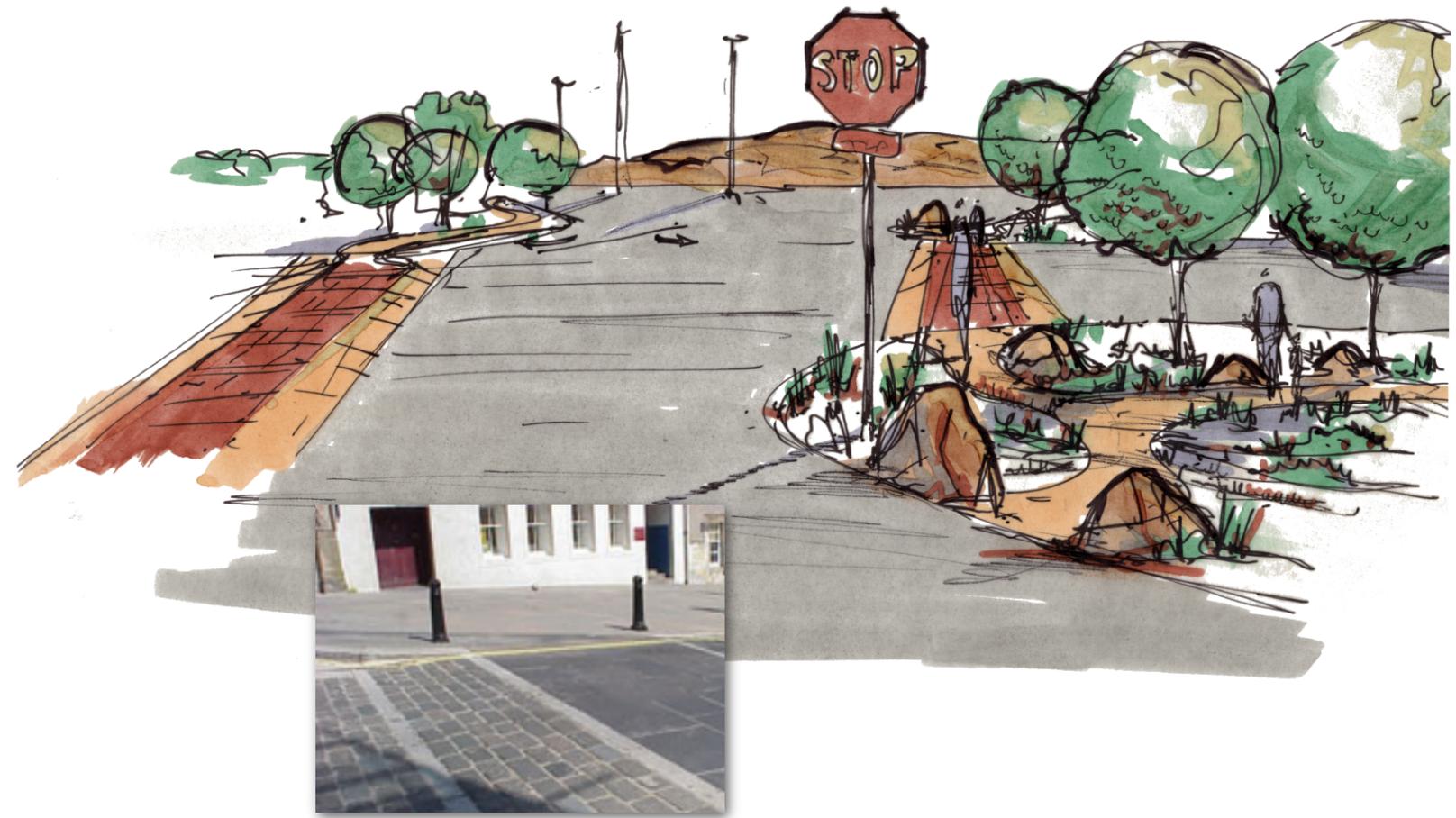


With plantings and seating this area becomes more of a promenade.

CROSSINGS



Speed tables are raised sidewalks that serve to slow traffic as well as delineate the road from the pedestrian corridor. The stop signs do little to emphasize this spot as a pedestrian crossing. A change in paving material and color as well as a slight raise would increase the safety of this location as a crossing. The sketch below shows a speed table that could be placed at either side of the crossing. The south side of the intersection is more beneficial because it connects to a trail that parallels Commerce Dr. leading to the volleyball area.



An identified crossing at this point would connect the inline hockey area with the trailhead parking lot and provide access to the volleyball courts. Warning signage placed to the south would improve the safety of a crossing in this location.

A rise in the road along Commerce Drive that makes it difficult to see this crossing point well in advance.

EROSION CONTROL

Water Management Methods

Runoff Farming (water harvesting)

- cisterns
- terracing

Diversion

- ridges oblique or parallel to the slope

Dissipation of runoff energy

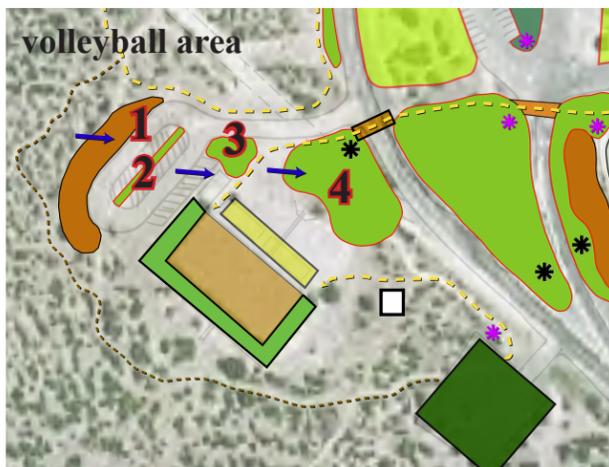
- stone line walls
- grass banks
- line hedges
- mulching



baseball and soccer overlook

One of the worst spots for erosion damage happens to be in the same place that is most prominent in the park, the beautiful little overlook area that sits atop a small knoll. Areas like this that are most susceptible to erosion should be dealt with first.

The volleyball area shown in the left image also is receiving extensive erosion damage and will continue to do so unless it is slowed through increased vegetation, walls, or diversions that direct water off the road and into vegetated areas. A stabilized bank (1), a parking lot vegetated median (2), a gateway planting (3), and finally a retention basin area (4) will greatly improve this area.



stacked field stones



use of terracing to reduce energy of water



sketch of baseball and soccer area overlooking terraced hillside



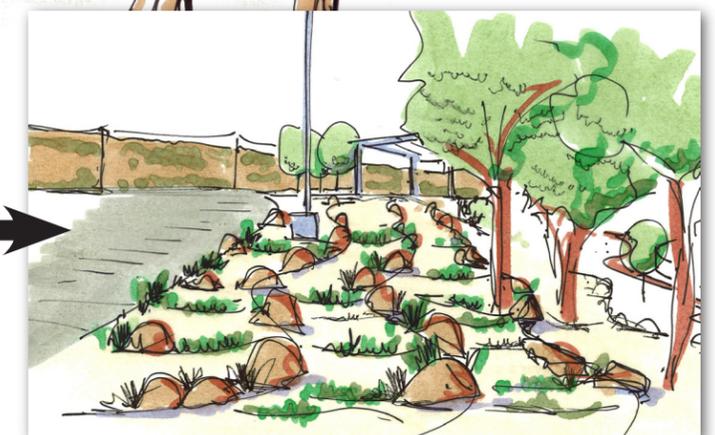
more natural placement of boulders into hillside



example of gabion wall type



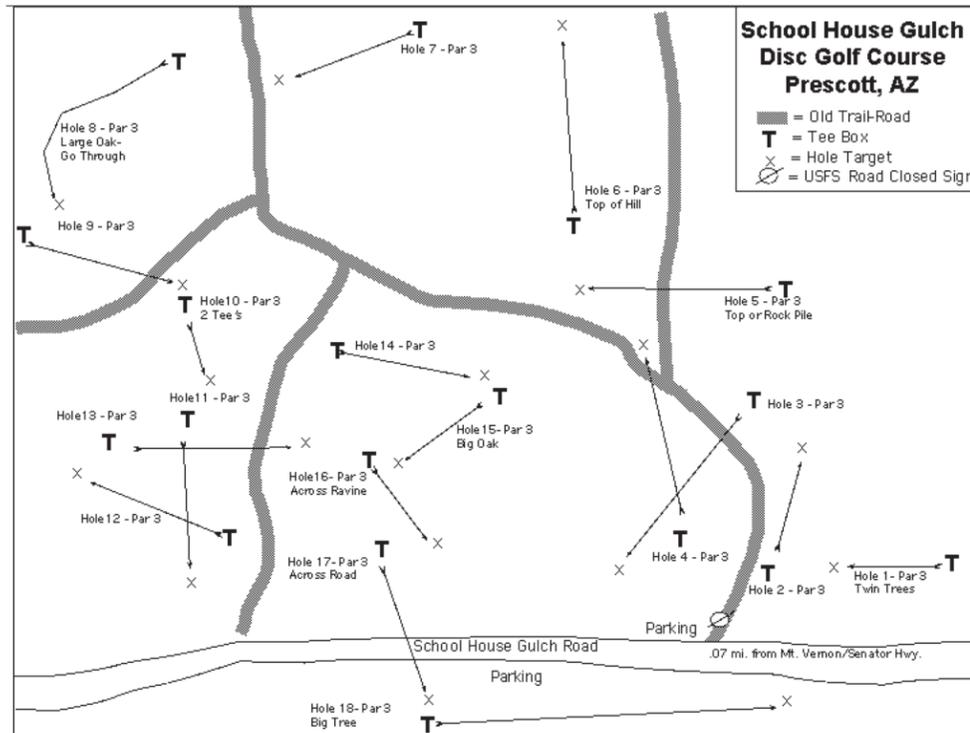
soil loss and undermining of road bed



use of boulders and vegetation to reduce impact

FRISBEE GOLF?

Frisbee or disc golf, also know as folf or frof, is becoming a very popular recreational activity. Considering the rapid growth of Prescott and the fact that there exists only one disc course in Prescott, this would be a great ammenity that would only add to the many other recreation opportunities provided at Pioneer Park. In fact, the Prescott disc golf web site mentions desire to secure another disc golf site and what better place than a regional park!

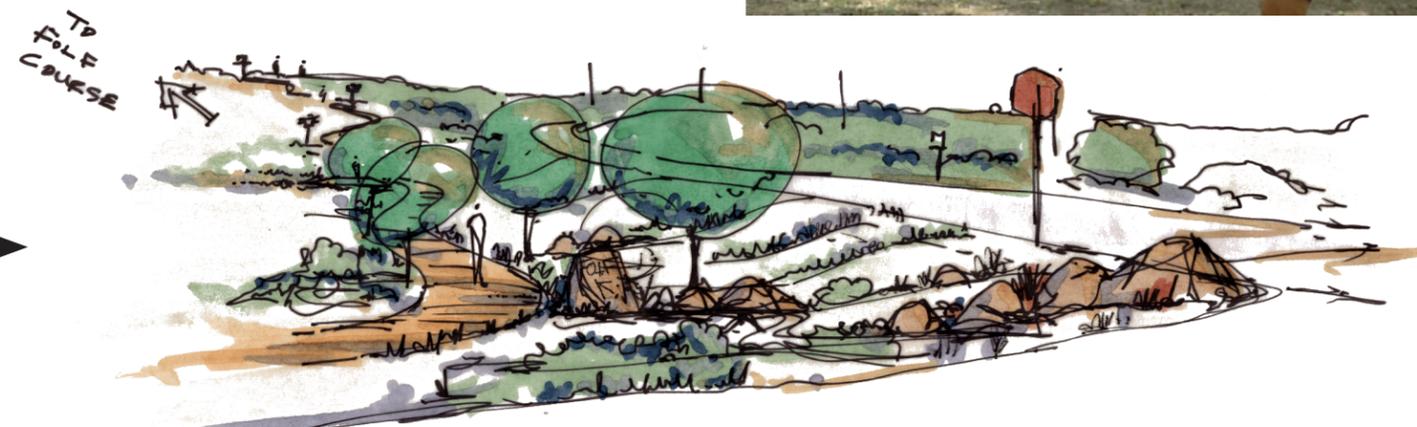


Frisbee golf can be played and enjoyed by all ages and the rules of the game are similar to “ball” golf. However, chain baskets replace golf holes and frisbees replace golf balls.

The School House Gulch Disc course uses marked trees as their “holes.” However, most courses are using the preferred chain baskets as shown in the images to the right.



Just adding a few trees between the road and the trail will create a feeling of seperation and protect this trailhead a little more.



Rendering of enhanced pathway leading to trails and proposed trailhead site for frisbee golf course.

NATIVE PLANT MATERIALS

The central arizona highlands of Prescott are a distinct biographic, climatic, and physiographic region that forms a diverse ecotone between the larger Colorado plateau to the north and the Sonoran Desert ecoregions to the south. Throughout Pioneer Park, any areas marked as “plantings” in the Master Plan should receive native vegetation. This not only reflects a more naturalistic landscape characteristic of the Prescott area, but establishment of these plants will be more successful and require less maintenance once established.

Elevation: 5,300 feet	Yearly average temperatures	Rain	18.80”	
	High	69.6	Snow	20.60”
	Low	36.9		

Perennial Grasses

Grasses have fibrous root systems that protect the soil from accelerated erosion as well as contribute organic matter. These grasses also create texture and interest to the landscape.

Indian Ricegrass (*Oryzopsis hymenoides*)
bunchgrass that looks great moving with the wind, very drought-tolerant, provides wildlife habitat and food, used for erosion control, height 2 ft., width 2 ft.



Mountain Muhly (*Muhlenbergia montana*)
Medium textured bunchgrass, dense-growing, used for naturalizing areas and reclaiming disturbed and degraded sites, provides wildlife habitat.



Deergrass (*Muhlenbergia rigens*)
Upright, coarse-textured clumping bunchgrass, dramatic arching form, accent plant wildlife and bird habitat, very low maintenance.



Switchgrass (*Panicum virgatum*)
Bunchgrass with wide, flat and bright green leaf blades, colorful russet or red-orange in autumn, very low care and maintenance, provides wildlife habitat, can be used as an accent plant, for mass plantings, and erosion control.



Galleta grass (*Pleuraphis jamesii*)
A beautiful, sod-forming native grass, highly drought tolerant, used for slope plantings and erosion control, land reclamation in disturbed areas, attracts butterflies, insects, large and small mammals, very low maintenance, 1.5 ft. tall, 2 ft. wide.



Little Bluestem (*Schizachyrium scoparium*)
Incredible bright red fall color softens to brick red but remains through winter, very low maintenance, attractive to butterflies and birds, used as mass plantings, border treatment, and on slopes for erosion control.



Evergreen sub-shrub

Fringed Sagebrush (*Artemisia frigida*)
Attractive silvery foliage, attract butterflies, drought tolerant, used for erosion control, 1-2 ft in height, 2 ft. wide.



NATIVE PLANT MATERIALS

Ground cover

Kinnikinnick (*Arctostaphylos uva-ursi*)

Evergreen ground cover, spreading, easy maintenance, excellent wildlife habitat attractive to many birds, good on slopes for erosion control, adaptable to medians and parking strips.



Mahonia repens (*Berberis repens*)

Creeping, woody-stemmed ground cover to 1 ft. tall, shiny, dark green, long-blooming, wildlife habitat, erosion control on slopes.



Herbaceous perennials

Bridges penstemon (*Penstemon bridgesii*)

Naturally found in forest openings among pinyons and ponderosa pines. Attractive to hummingbirds and butterflies, very low maintenance, good for slope plantings.



Rocky Mountain penstemon (*Penstemon strictus*)

Dark to brilliant purple-blue, attractive even when not in bloom, very attractive to butterflies and hummingbirds, low maintenance, excellent for establishing disturbed areas, aggressive enough to establish in somewhat weedy areas.



Woody perennial

Mountain tail-leaf (*Pericome caudata*)

Medium-textured, bright green, wide-spreading form. Covered with clusters of yellow flowers in late summer with leaves turning bright yellow in the fall. Fast-growing, beautiful as a mass planting. Also used as background and for establishing slopes.



Wild rose (*Rosa woodsii*)

Thicket forming shrub, intensely fragrant, large showy, pink roses. Provides excellent wildlife habitat for birds and other animals. Many prickles make them an excellent barrier plant or natural security fencing. An extensive root system and dense branches make for excellent erosion control on slopes.



The above mentioned plants are all high elevation plants native to Arizona and require low maintenance once established. For a more detailed list of additional low water use plants (non-native and native) visit the site:

http://www.cityofprescott.net/services/public/conservation.php#plant_list

Here you can download a pdf showing the Low Water Use Drought Tolerant Plant List which is the “Official Regulatory List for the Arizona Department of Water Resources, Prescott Active Management Area.”