

SAVANNA PARK

Reedsburg, WI
Author
Asa Pranikoff

A SENIOR CAPSTONE PROPOSAL

Submitted in partial fulfillment of the requirements for the degree
Bachelor of Science in Landscape Architecture

Department of Planning and **Landscape Architecture**
College of Letters and Science

University of Wisconsin - Madison
Madison, WI

May, 2020

Approved by
Eric Schuchardt, PLA, ASLA
Faculty Associate

ACKNOWLEDGEMENTS

First and foremost, I would like to thank the City of Reedsburg, and especially Tim Becker, City Administrator, and Matt Scott, Director of Parks and Recreation for inviting me to work with them on expanding an already excellent park system. Cities like Reedsburg are leading the way in developing healthy and fun communities. This project would not have been possible without the help and resources provided by them and their community.

I would also like to extend my thanks to all of the faculty and staff in the Department of Planning and Landscape Architecture, for without them I would be nowhere close to where I am today. Their excellent guidance, encyclopedic knowledge, and unwavering drive to produce the best Landscape Architects in the world pushes us all to be the best thinkers and designers we can be. The lessons I've learned in my time with the Department are invaluable and extend far beyond the world of Landscape Architecture.

I also cannot overstate the help I've received from my classmates and peers in the studio. Without their help and ongoing support, I surely would have lost my mind working through the many long nights of our last four years here.

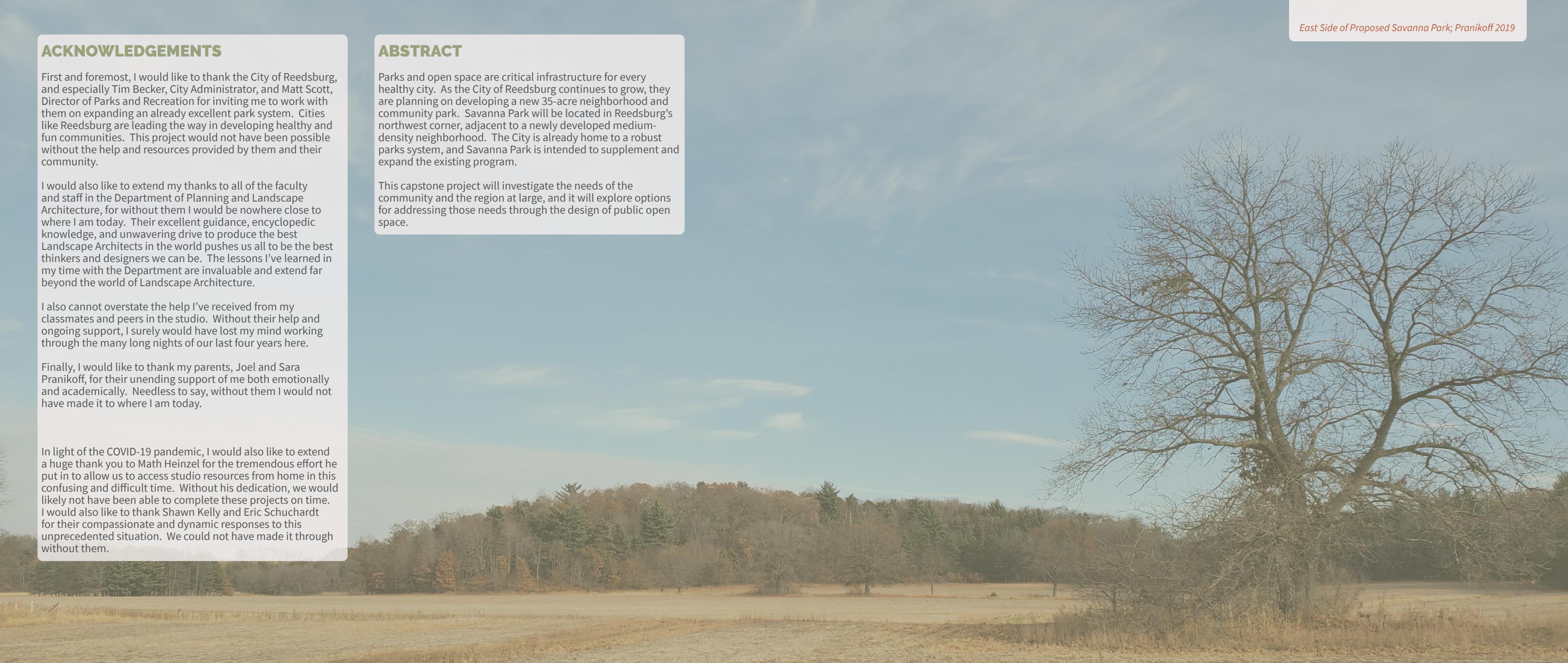
Finally, I would like to thank my parents, Joel and Sara Pranikoff, for their unending support of me both emotionally and academically. Needless to say, without them I would not have made it to where I am today.

In light of the COVID-19 pandemic, I would also like to extend a huge thank you to Math Heinzl for the tremendous effort he put in to allow us to access studio resources from home in this confusing and difficult time. Without his dedication, we would likely not have been able to complete these projects on time. I would also like to thank Shawn Kelly and Eric Schuchardt for their compassionate and dynamic responses to this unprecedented situation. We could not have made it through without them.

ABSTRACT

Parks and open space are critical infrastructure for every healthy city. As the City of Reedsburg continues to grow, they are planning on developing a new 35-acre neighborhood and community park. Savanna Park will be located in Reedsburg's northwest corner, adjacent to a newly developed medium-density neighborhood. The City is already home to a robust parks system, and Savanna Park is intended to supplement and expand the existing program.

This capstone project will investigate the needs of the community and the region at large, and it will explore options for addressing those needs through the design of public open space.





ABOUT THE AUTHOR

I was raised with a passion for exploring how people interact with the environment around them. In my time as a student in the Department of Planning and Landscape Architecture, I have learned to expand my perspective to the community scale and beyond.

As a transplant from the world of mechanical engineering, I have a penchant for the technical side of things. Landscape Architecture provides me the ideal combination of complex problem solving, creativity, and environmental stewardship.

Outside the studio, I spend my time camping, rock climbing, and taking in as much art as I can muster.

Asa Pranikoff
Department of Landscape Architecture

Fall 2019 // Spring 2020

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SEMESTER 1

AUGUST 2019 - DECEMBER 2019

INTRODUCTION



INVENTORY & ANALYSIS



PROPOSAL

INTRODUCTION



View Towards Doris Road; Pranikoff 2019

INTRODUCTION

To fulfill the requirements of the Senior Capstone Program in the Department of Planning and Landscape Architecture at the University of Wisconsin-Madison, I will investigate how the idea of play space design may inform the design of a new regional park and recreation area. This investigation will be given context and focus by the concerns and goals of the City of Reedsburg, which include accommodating recreational needs, athletics and active recreation, advanced stormwater management, and ecology and restoration. The new thirty-five-acre development between Dessa Rain Drive and County Highway V in Reedsburg, WI will be the site for this study.

Impactful Parks

Parks should be places where development flourishes, both on the individual and the community scale. Countless studies show that the quality and availability of parks impacts the safety and quality of neighborhoods. Parks provide the setting for community events, recreation opportunities, private and public gatherings. Currently the site serves the entire Reedsburg community, as it hosts a public brush composting

pile and a public archery range to practice bow-hunting, a popular activity in the area. This program is important to the city, and it will be retained and improved in the final design.

My experience working with communities and developing park programs will help me develop this site into a functional and active park area that suits the needs of the local neighborhood and the entire City of Reedsburg. Research on effective park design will guide me in creating an engaging space that both adults and children will want to visit.



Figure 1.01 - Archery Range; Pranikoff, 2019

Regional Ecology

To abide by the professional goals of Landscape Architecture, special care will be given to ensure this project proceeds with the utmost stewardship to the local and regional environment. A portion of the efforts of this project are dedicated to restoring the natural ecology of the site, which is currently troubled with aggressive and invasive species such as buckthorn and honeysuckle. While the site does not lie within the current FEMA 100-year floodplain for the Baraboo River, the City of Reedsburg has indicated that local flooding causes trouble in the area. I will apply theories and techniques for advanced storm water management to alleviate some of the stress during large rain events.

Community Needs

Reedsburg is a growing community and rapid development around the project site has left a need to be fulfilled. At the neighborhood scale this park will greatly reduce the distance children must travel to reach a playground. At the regional scale this park will provide new recreation opportunities such as walking and hiking trails, ball fields, and the space to accommodate a future recreation center. Baseball is an important part of the Reedsburg identity, from the Little League to state-wide adult tournaments, and will thusly be an important driver of design decisions in this project.

TYPE OF WORK

The project I am undertaking is a master plan for a new regional-scale park and recreation area in the Northwest corner of the City of Reedsburg. There has been rapid development in this area over the past several years, including the construction of a new neighborhood, making this an ideal site for the construction of a new park.

The site is approximately thirty-five acres, with access from both Doris Road and County Highway V. The client requests that the project be presented in approximately five-acre phases to help organize fundraising and construction. The first phase will be the playground adjacent to the new neighborhood, and we will expand outward from there to encompass the entire site.

Project Scope

The extents of this project will include but are not necessarily limited to the two parcels of land set aside for this development. A master plan will be developed for the new park including the location and suggested design of the necessary new program elements. The plan will be delivered in approximately five-acre phases to assist the client in securing funding for the project.

Professional Focus

My client has a few concerns about this site itself that we will address. The existing circulation is not suitable, as it draws truck and trailer traffic through the neighborhood streets to access the brush dump. The area also lies within a FEMA flood zone and experiences periodic flooding. Additionally, invasive plant species currently threaten the ecology of the site. At the regional scale, the city does not have enough ball fields to accommodate the demand of the minor league teams in the area. They also have floor plans for a new recreation center, but they do not have a good place for it to go. To help my client achieve their goals, I will draw on my expertise in the areas of advanced stormwater management, ecology and restoration, and regional and spatial planning. Throughout the process, we will incorporate community feedback and the concerns of local stakeholder groups to better suit the needs of the region.

Capstone Products

The products of this capstone will include a set of design documents and recommendations for a new regional park, which will be submitted to the City of Reedsburg, and a capstone document, which will be submitted to the Department of Planning and Landscape Architecture in partial fulfillment of the degree of Bachelor of Science in Landscape Architecture.

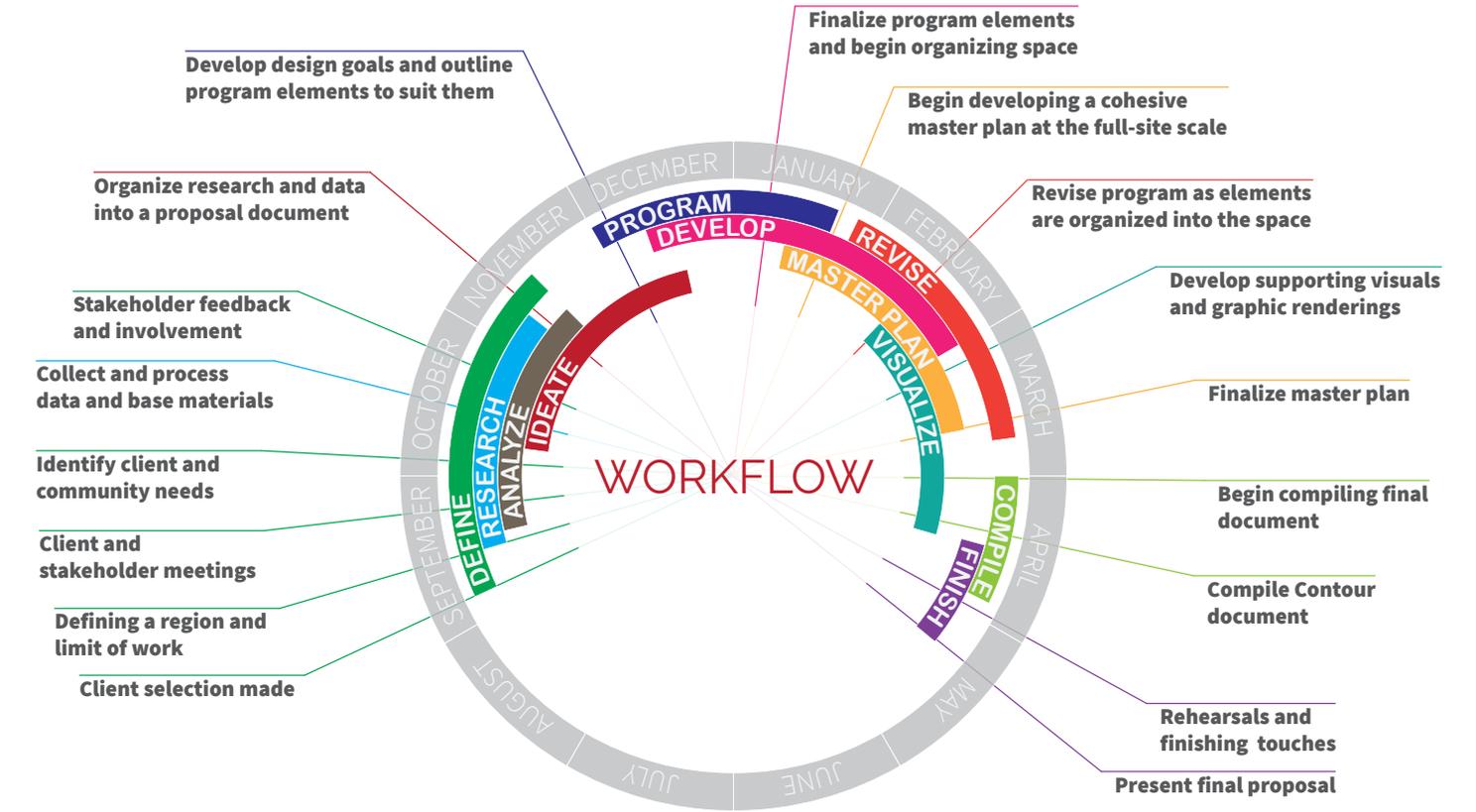


Figure 1.02 - Workflow Diagram; Pranikoff, 2019

PROJECT WORKFLOW

As the project progresses over the course of two academic semesters, we go through a number of organized phases in the integrated design process. The initial step in the process is defining the problem, where we evaluate the existing situation and develop an understanding of the client's needs and the needs of the community. The definition process is iterative, and our exact understanding of the project and solution continues to grow throughout the first semester. By the end of the first semester (mid-December), the majority of the research and analysis is done. At this point, we begin developing a list of program elements that we will incorporate into the design phase.

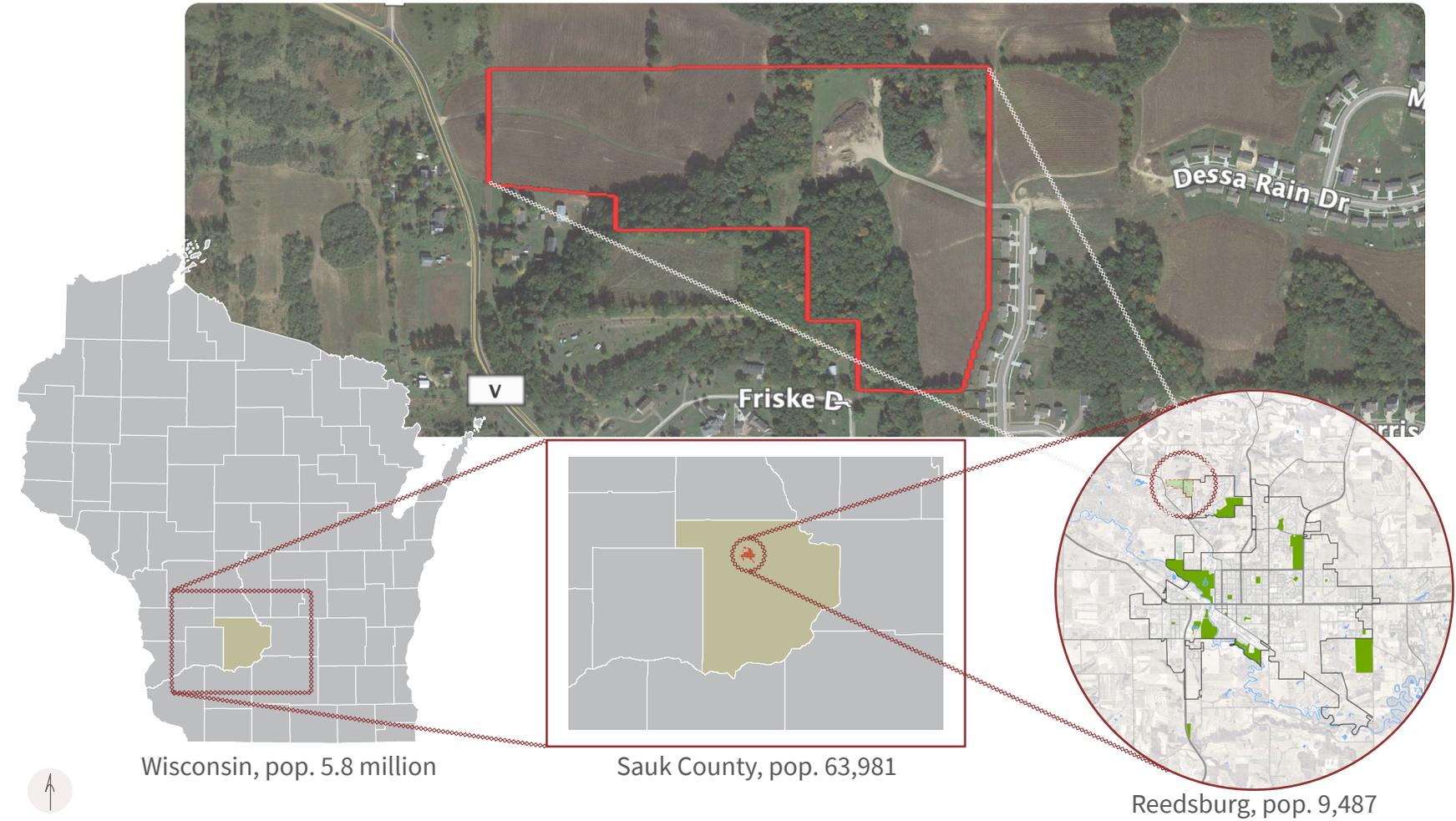
Towards mid- to late-January we start developing the master plan and organizing the ideas we've come up with. The master planning process is again iterative and sees many changes throughout its short life. By mid-March, the plan is concrete, and we begin developing visual aids and organizing the results of the design process into a final document. The final document will be completed and ready for submission to the client and the Department of Planning and Landscape Architecture at the beginning of May.

CONTEXT

SITE LOCATION & HISTORY

Geographic Context

Figure 2.01 - Site Context Map; Pranikoff, 2019



Wisconsin, pop. 5.8 million

Sauk County, pop. 63,981

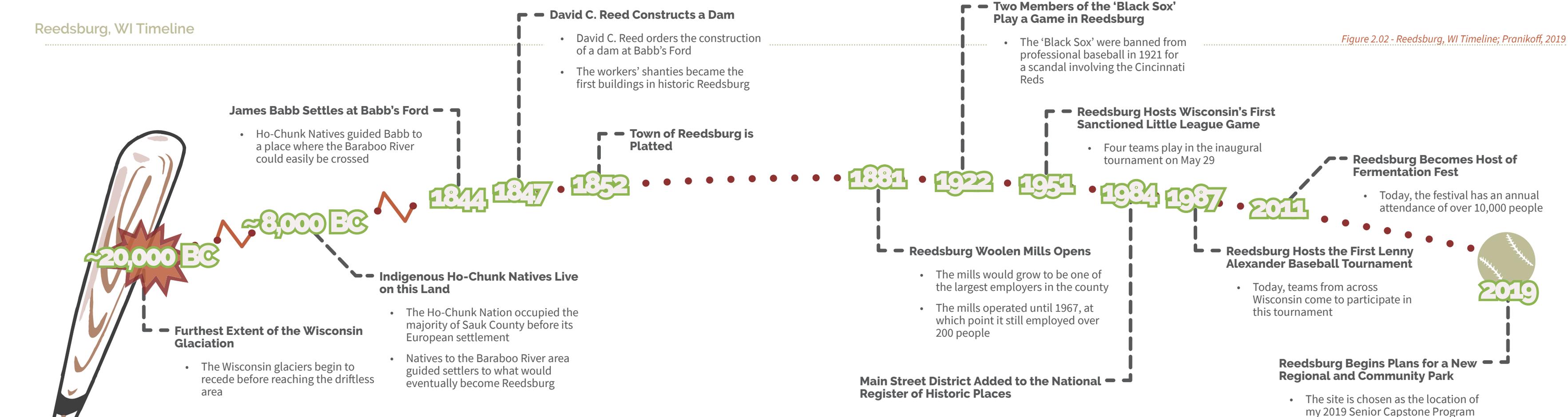
Reedsburg, pop. 9,487

Reedsburg is located in the south-central part of Wisconsin in a portion of the state known as the Driftless Area – an ecological region of the upper Mississippi River valley left untouched by the most recent glacial drift. The region is characterized by its striking topography, numerous streams and water bodies, and picturesque landscape (National Trout Center, 2019). The city lies on the Baraboo River – a tributary to the Wisconsin River and ultimately a

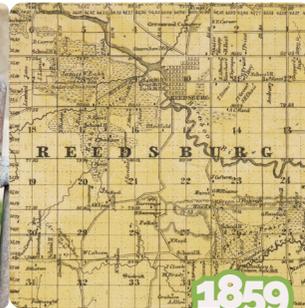
part of the Mississippi River watershed, the second largest drainage system in the United States. The proposed site for Savanna Park lies in the Northwest corner of the City of Reedsburg, about 1.15 miles northeast of the Baraboo River. The site forms the border between the City of Reedsburg and the surrounding township, the Town of Reedsburg.

Reedsburg, WI Timeline

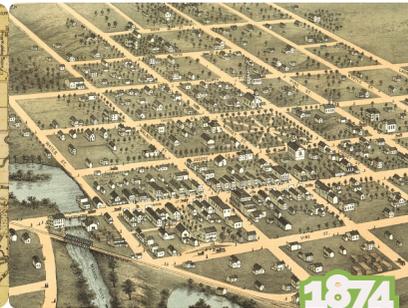
Figure 2.02 - Reedsburg, WI Timeline; Pranikoff, 2019



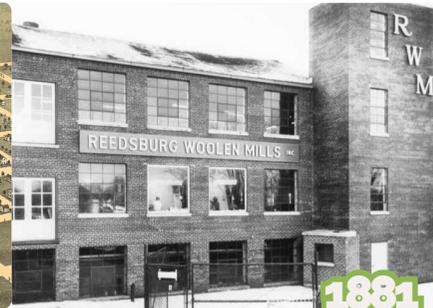
Babb's Ford Historic Marker



County Plat Map



Bird's Eye View of Reedsburg



Reedsburg Woolen Mills



Main Street Business District



Kiwanis Little League Team



Fermentation Fest on Main Street



Present Day Project Site

DESIGN PLAN

GOALS, DESIGN DRIVERS, & PROGRAM

ECONOMY
+ SOCIAL EQUITY
+ ECOLOGY

COMPREHENSIVE
GOALS



PROJECT GOALS & DESIGN DRIVERS

Reedsburg is currently home to a bustling minor-league baseball community, and they can become pressed for space to host games at the height of the season. One of their primary concerns is incorporating at least one new ball field, but ideally two, into the new site. Baseball is a focus of their community, and it brings them together in a variety of ways. They also rely on the baseball community to bring money into their city during the season and having two new ball fields would help bolster tourism dollars.

Additionally, they are in need of a new neighborhood park for the single-family housing development going up adjacent to the site. They would like to support the families living there by providing a close, convenient, and safe space for the children to play. Reedsburg already has a robust park system, and they would like to uphold that image.

Economic

Increase economic value of league baseball

- Develop new baseball diamonds and softball fields to accommodate a greater number of league and recreational teams
- Expand the service area of ball fields to engage more of the city in the baseball community

Add value to newly built homes

- Expand the service area of neighborhood-scale parks to include the new development in the Northwest corner of Reedsburg
- Develop a new tot-lot to serve the aforementioned new development

Increase the value of the Reedsburg parks system

- Incorporate 35 additional acres of park land into the already robust parks network
- Reduce the stress on existing amenities by increasing the number per-capita

Social

Provide access to recreation opportunities

- Create a new park to provide walking-distance service to residents in the new development
- Identify a suitable location for the new recreation center the city is planning on constructing

Retain existing program valued by the community

- Develop a plan that accommodates the existing archery range and brush pile while also incorporating new program

Increase pedestrian safety on Doris Road and Dessa Rain Drive

- Provide an alternate solution for truck-and-trailer traffic using neighborhood streets to access the city brush pile
- Create additional vehicular access options to reduce traffic in and out of the park and recreation center

Respect the wishes of neighboring communities

- Plan on naturally screening the site from the neighboring Township residents who have expressed concerns about noise and sight lines

Ecological

Reduce the threat of invasive plant species

- Develop a plan to manage and remove existing buckthorn, honeysuckle, and other invasive species from the forested areas of the site
- Develop a plan to foster and improve the existing oak savanna

Mitigate flooding issues on the site

- Create a grading and drainage plan that will reduce storm water runoff from the site to the surrounding neighborhood
- Plan for possible flood events with planting design and resilient structures

Increase the availability of pollinator habitat

- Develop a pollinator plan that serves a variety of valuable native pollinating species
- Remediate existing agricultural land so it is suitable for pollinator nesting and foraging

PROGRAMMATIC ELEMENTS

Existing Program

Ex. City Mulch Site



- Current mulching site is about 45,000 ft²
- Serves only City of Reedsburg residents
- Truck and trailer traffic is disruptive to the neighborhood

Ex. Archery Range



- Currently about 3,100 ft²
- Consists of six targets and a small rack to hang equipment
- No structure or cover for rain

Proposed Program

Improved Public Open Space



New public open spaces will improve on the existing spaces on the site. Open spaces shall have easy access to water and restroom facilities. Each space shall provide a mixture of sunny and shaded areas, and at least one new shelter will be provided.

Walking & Hiking Trails



Additional walking and hiking trails will improve upon existing walking infrastructure in the city. Trails shall be well-marked and accessible to most abilities. Trail infrastructure shall be designed in order to preserve and enhance the natural conditions of the site.

Renewed Forest & Pollinator Habitat



The existing remnant oak savanna on the site is degraded and overrun with invasive species. Where it is acceptable, new forest habitat will be created. Additionally, all plantings on the site will be designed with pollinators in mind.

Unstructured Recreation

Structured Recreation

League-Size Baseball Diamonds



Incorporating one additional field to accommodate adult leagues is our acceptable minimum, with two being our goal. Fields shall be oriented with the line from home plate through second base pointing within 22.5° of east-northeast.

Nature-Inspired Adventure Play Areas



A minimum of two play areas will be developed, with one tot-lot dedicated to the 1-6 y.o. age group. Play areas shall be universally accessible, connect children with nature, and encourage socialization. A minimum of 10% of the play area shall interface with the existing forest.

Tournament-Size Turf Field



One soccer tournament-size turf field will be provided. This field shall be allowed to overlap with the outfield of at most one of the baseball diamonds if two are included. The field shall be supported with seating and running water.

Proposed City Recreation Center



The City of Reedsburg has developed plans for a new community recreation center. The footprint of this building will be included in the master plan.



RESEARCH TOPIC

The focus of my research this semester is the design and efficacy of playgrounds and designated play spaces in communities. This includes evaluating the design elements of different types of play spaces, both structured and unstructured, such as is mentioned in Hayward, Rothenberg, & Beasley's article comparing the values of traditional and adventure play. I will look at the types of play equipment being used as well as researching aspects of "adventure playgrounds" that benefit communities.

In addition to quality of play, I will be studying how recreation areas can be designed to better attract and retain visitors. In *Adults' motivation for bringing their children to park Playgrounds*, the authors discuss aspects of parks that attract parents and children alike. Studies like these will help me create a space that will get the use it deserves and benefit the local community to the greatest extent possible.

I will also focus on ways that we can incorporate nature into play. Our site's ample existing forest provides an excellent opportunity to connect play with the natural ecology of the region.

LITERATURE REVIEW

Brussoni, M., Olsen, L., Pike, I., & Sleet, D. (2012). Risky Play and Children's Safety: Balancing Priorities for Optimal Child Development. *International Journal of Environmental Research and Public Health*, 3134-3148.

This article discusses the fact that there are distinct, tangible benefits that come out of children's ability to play freely. It goes on to define what exactly "free play" is and how it differs from other forms of childhood play. The authors define free play as intrinsically motivated – play for play's sake – instead of motivated by an outside force, such as adults encouraging youth to participate in a soccer game. The article goes further, describing "risky play" and how the opportunity to explore risk contributes to greater cognitive growth. This article cites several studies indicating that children have a strong preference for unstructured play, quoting figures as high as 40% of children seeking alternatives to playgrounds, and as high as 90% preferring more challenging playground equipment.

The article briefly mentions adventure playgrounds as an option to incorporate less structured play, but it does not go into great depth on the design or efficacy of this type of playground. The authors offer some support on the topic but indicate that there is not very much peer-reviewed research and most literature on the subject is "grey."

Refshauge, A., Stigsdotter, U., & Cosco, N. (2012). Adults' motivation for bringing their children to park playgrounds. *Urban Forestry & Urban Greening*, 396-405.

As many children are dependent on their parents to either transport them, supervise them, or both, it is important that parents see value in bringing their children to a certain playground or park. The article discusses several factors that influence parents' opinions on parks. Some of these factors are not fully controllable, such as the proximity of the park, but others are, such as the variety of equipment and the accommodations provided for adults. The authors identify social aspects of the park design as the second most important factor contributing to how much adults like a playground (the first factor being proximity). Parents like to take their children places where they can choose to socialize with other parents comfortably.

In addition to evaluating which parks people preferred to go to, the authors looked at which parks people stayed at the longest. They identified the variety of play equipment and the surrounding green space as the two most important factors for keeping people at parks longer. Parents with multiple children valued parks where multiple age groups could play, assuring that one child did not become restless or bored.

Staempfli, M. B. (2009). Reintroducing Adventure Into Children's Outdoor Play Environments. *Environment and Behavior*, 268-280.

This article focuses specifically on the implementation of adventure playgrounds and the aspects of them that are beneficial to children's development. While my research will not focus only on adventure playgrounds, some of the details that make them so appealing could be applied elsewhere. The authors emphasize the benefit of the children's sense of ownership of the space, indicating they are more engaged in play and will communicate more with each other in a space they feel they are developing themselves. Additionally, the authors show a causal link between high quality outdoor play and decreased delinquency rates later in life.

The authors also describe some of the limitations of adventure playgrounds which may contribute to their lukewarm success. The biggest contributor to the failure of adventure playgrounds is cost: they require continuous input of materials, maintenance, and frequently employ several play supervisors. In order to be greatly successful, they need to be well-funded and well-supported by the community.

PRECEDENTS

LEARNING FROM & IMPROVING ON THE PAST



PRECEDENT REVIEW

Studying precedent works is an extremely helpful way to develop new and novel solutions to challenges in any project. A wealth of existing works has been examined in the development of this project, but Lincoln Park Playground, the New York City Playgrounds Program, and Emdrup Playground stand out among them.

LINCOLN PARK PLAYGROUND

Project Type: Playground, Skate Park, Par Course, School Yard

Location: Somerville, MA, United States

Firm: Weston & Sampson Design

Client: Argenziano Middle School // City of Somerville

Completed: 2019

Project Highlights

- ADA accessibility throughout the entire site
- 25-year storm capacity (189,000 gallons)
- Educational tools such as rainwater gardens, swales, and an outdoor classroom
- Serves a variety of community members with its sophisticated program

How it Applies

This sophisticated playground is an excellent example of a comprehensive modern recreation solution. **The way that amenities are situated together creates a flow that both connects and compartmentalizes spaces**, allowing a variety of play styles in a small space. This along with the advanced storm water management set a high benchmark to meet in my own play space design.



Site Master Plan & Drainage Details

Figure 4.01 - Lincoln Park Playground Master Plan; Weston & Sampson Design, 2019

NEW YORK CITY PLAYGROUNDS PROGRAM

Project Type: Playground, Community Engagement, Park Network

Location: Various, New York City, NY, United States

Firm: SiteWorks

Client: New York City Schools

Completed: 2011 - Present (ongoing phases)

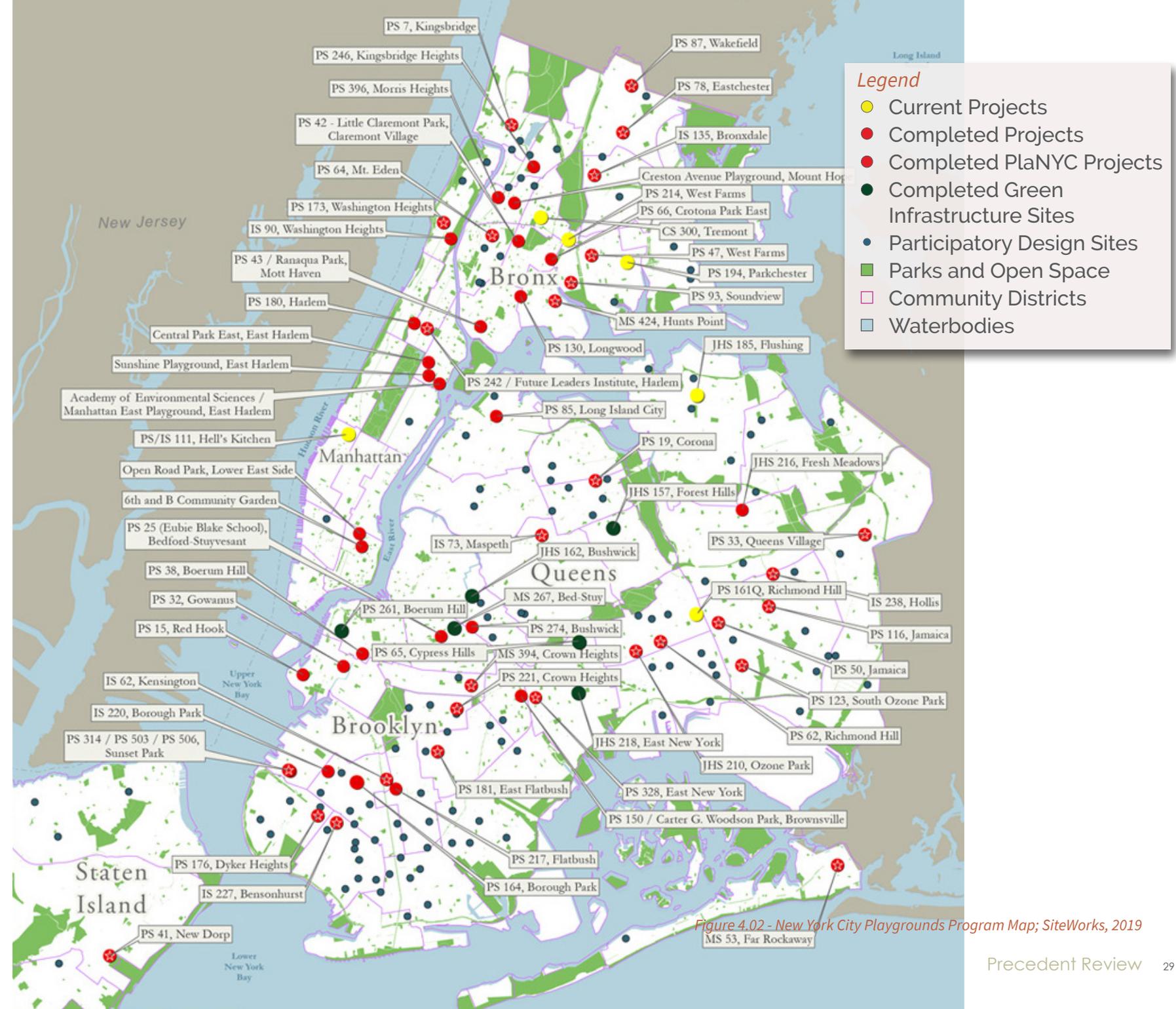
Project Highlights

- High degree of participatory design
- Development of a rich network of parks
- Considerable city-wide storm water capture
- **Community stewardship and engagement**

How it Applies

Community-driven design is an important part of any project, and this undertaking is an excellent example. **Connecting with local schools to develop program that children will actually use and enjoy** increases the efficacy of the parks tremendously. This connects to my research on how parks and playgrounds can be designed to increase engagement and prolong play time.

Additionally, the parks developed in this project focus heavily on **improving systems throughout the city** - both in terms of water management and social equity. This project is an excellent example of systems thinking and **designing with consideration for context**.



EMDRUP JUNK PLAYGROUND

Project Type: Adventure Playground, Junk Playground, Social Experiment

Location: Copenhagen, Denmark

Firm: Carl Theodor Sørensen

Client: The Children of Copenhagen

Completed: 1943

Project Highlights

- Pioneering adventure play design
- Incorporation of local and recycled materials
- Helps children develop social skills and a sense of identity
- Supplements the lost sense of adventure that comes from living in a city

How it Applies

While this example of adventure play is extreme, adventurous play is starting to be recognized as an important aspect of childhood development, and many lessons can be taken from Sorensen's early adventure play work. **Incorporating local materials and pushing children to explore creates a unique play experience** that will draw people from all over the area.



While there is relatively little information regarding the specific site plans, program, and construction of this project, the impact of Sørensen's legacy on adventure playgrounds around the world is great.

From these images, we can build ideas of the kinds of interactions children want to have with materials, space, and each other.



Figure 5.01 - Sauk County Region; Pranikoff, 2019

REGION

THE PEOPLE & PLACES OF SAUK COUNTY



REGIONAL PULSE

#saukcounty on Instagram



Sauk County Demographics

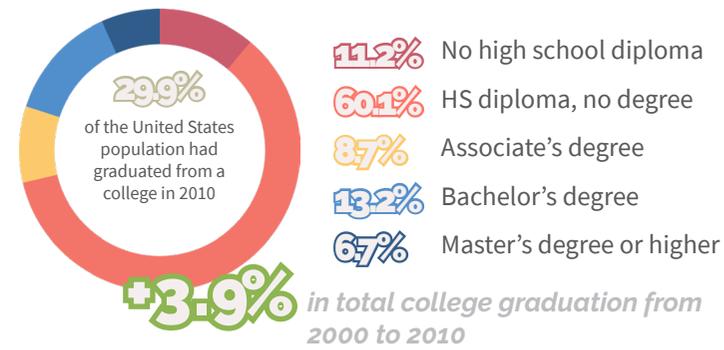
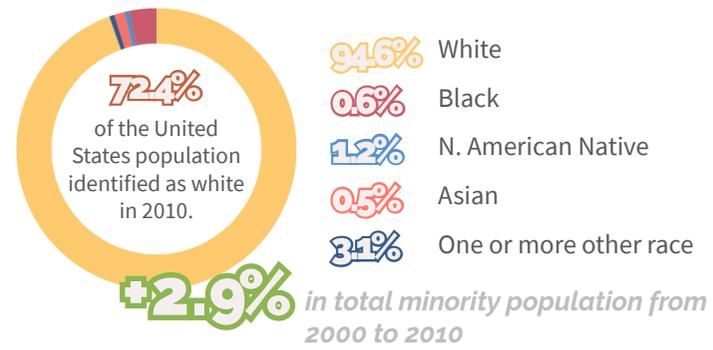


Figure 5.02 - Sauk County Population Demographics; Pranikoff, 2019

Racial Diversity

Diversity in Sauk County has been increasing steadily since 1990. However, diversity in the county is still lower than the United States average. As diversity in the region increases, it is important to make sure we meet the needs of all groups of people - in terms of both design and community engagement.

Educational Attainment

In general, Sauk County trails about 1.5% behind the United States in terms of college degree attainment, though education levels are increasing across the county. As school systems in the region become more robust, we can explore ways to engage students in regional activities, be it outdoor education on pollinator habitat or intermural baseball teams.

REGIONAL GROWTH

Population Statistics

Population

As population in Sauk County increases, the socioeconomic state of the region changes. With medium-size cities like Baraboo developing greater into micropolitan economic districts and tourist destinations like Wisconsin Dells drawing outside money into the region, Sauk County is in a good place to develop greater regional recreation destinations. The county is already home to some of the largest conservation areas in the state, and developing better infrastructure of parks and habitat between them is beneficial to their success.

Density

As the population in Sauk County increases, we also see densification of the region's larger cities, such as Baraboo and Reedsburg. Densification is good, but in the process it is important to also develop greater supporting infrastructure. As Reedsburg becomes more dense, developing additional parks that are future-conscious is critical in supporting the growing population.

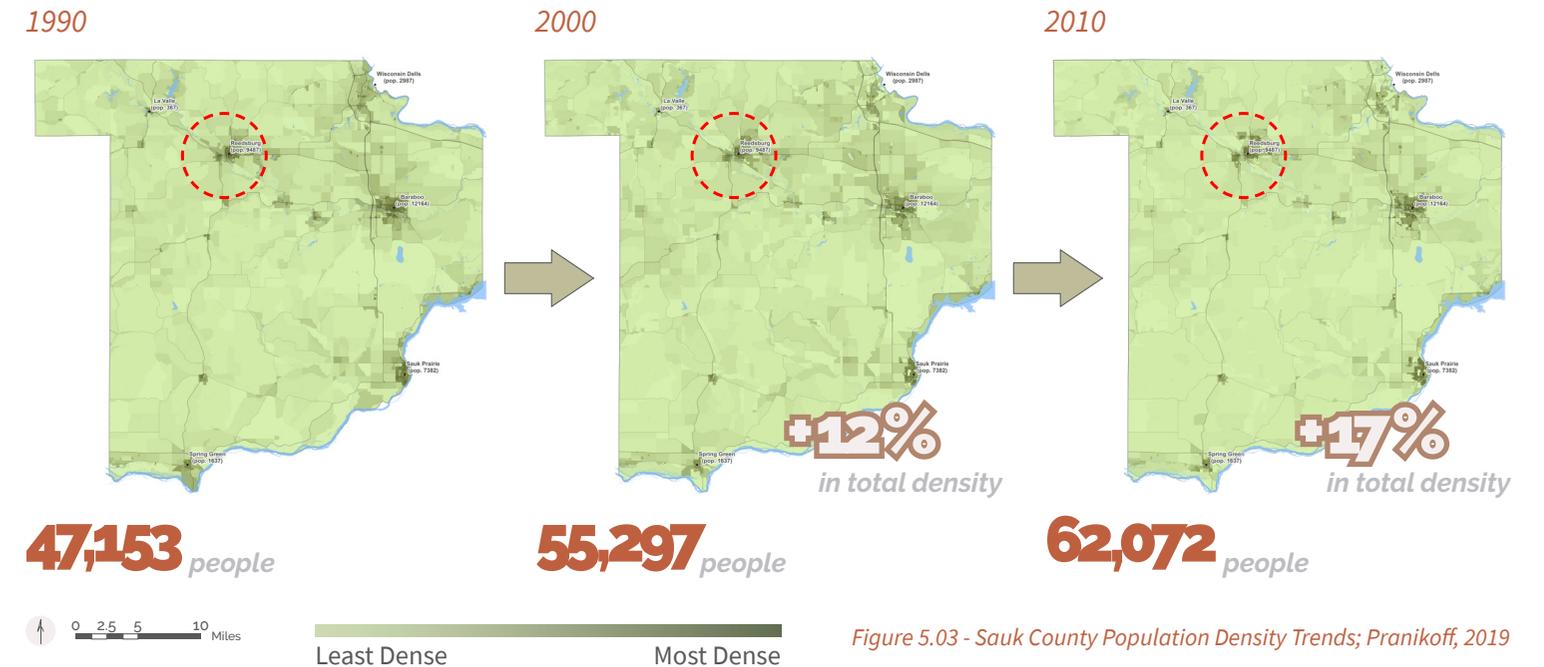


Figure 5.03 - Sauk County Population Density Trends; Pranikoff, 2019



Overlook of the Wisconsin River from Ferry Bluff

COMMUNITY

LOCAL ACTIVITIES, DEMOGRAPHICS, & COMMUNITY NEEDS

View of Main Street; Wikimedia 2007



COMMUNITY PULSE

#reedsburg on Instagram



Local & Regional Events



Fermentation Fest; Pranikoff 2019



Scene from Heritage Day Rendezvous Reenactment; Reedsburg Area Historical Society Pioneer Log Village

Fermentation Fest

- Regional celebration of fermented foods, drinks, arts and culture
- Over 10,000 annual attendees

Reedsburg Butter Fest

- Arts and crafts fair, tractor pulls, parades and more
- Celebration of Reedsburg's butter industry of the 60's

Heritage Day Rendezvous Reenactment

- Hosted at the Reedsburg Pioneer Log Village
- Celebration of early 1800's pioneer culture
- Reenactments, exhibits, food, arts and crafts

Lenny Alexander Baseball Tournament

- Wisconsin's premier Little League invitational
- Over a dozen teams from across southern and central Wisconsin come to Reedsburg to play

COMMUNITY GROWTH

Reedsburg Historic & Projected Population Growth

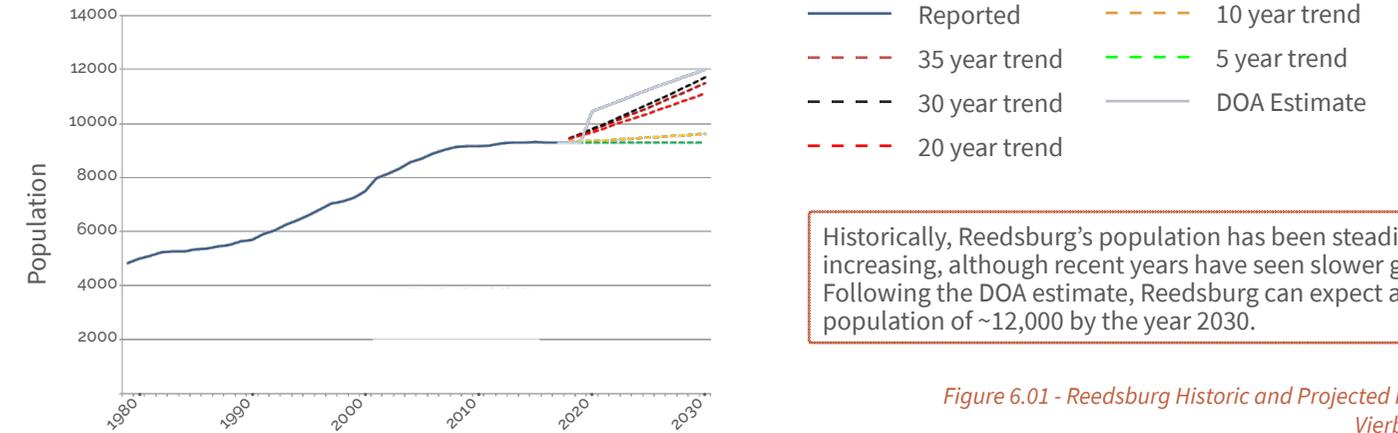
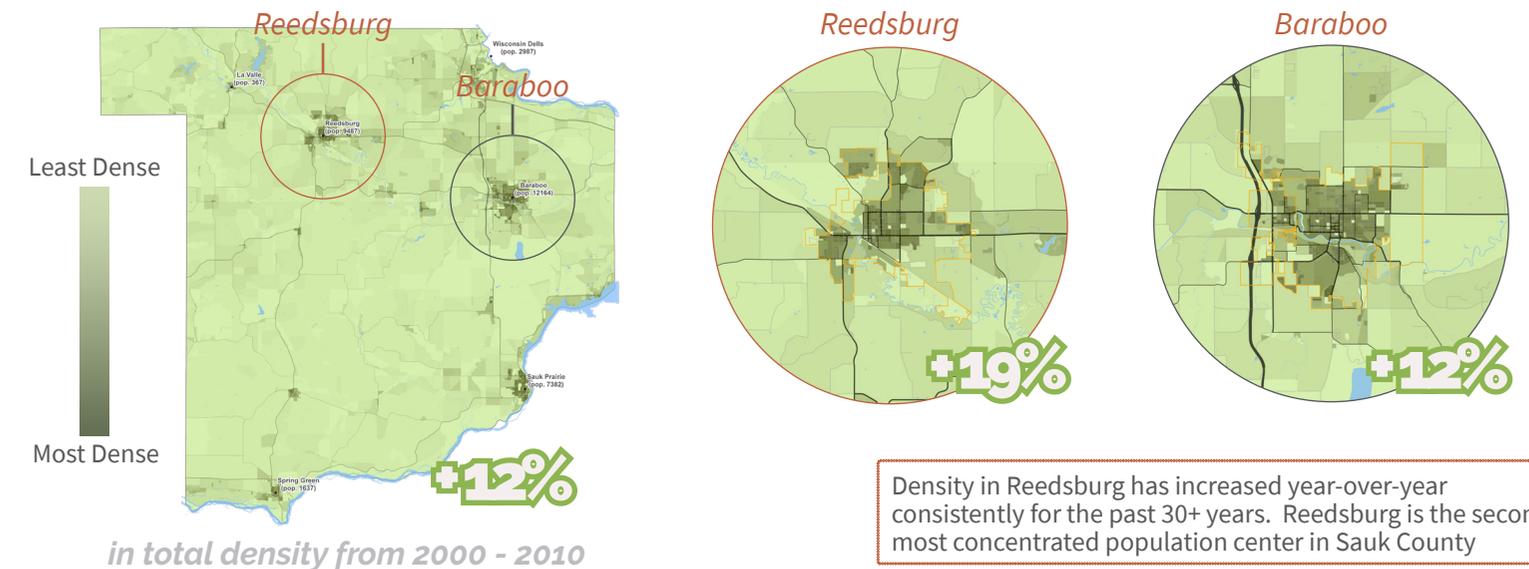
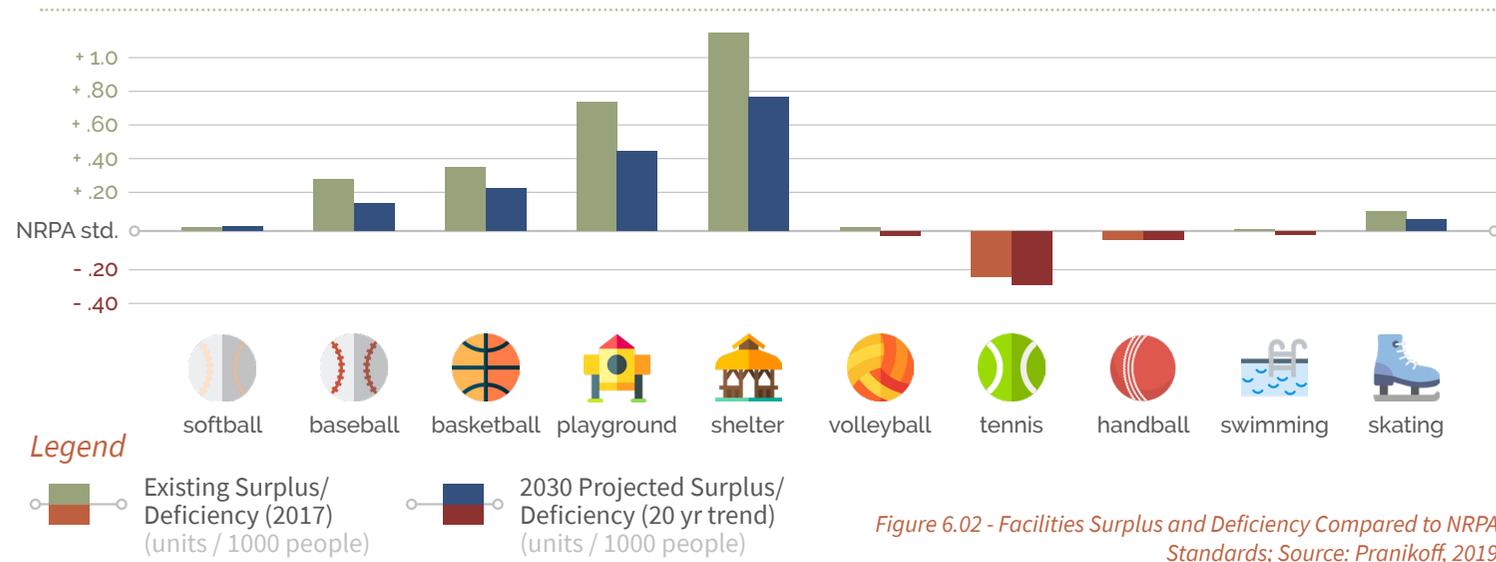


Figure 6.01 - Reedsburg Historic and Projected Population; Vierbicher, 2017

Sauk County Population Centers, 2010 Density



Facilities Deficiency & Surplus, Current and Projected



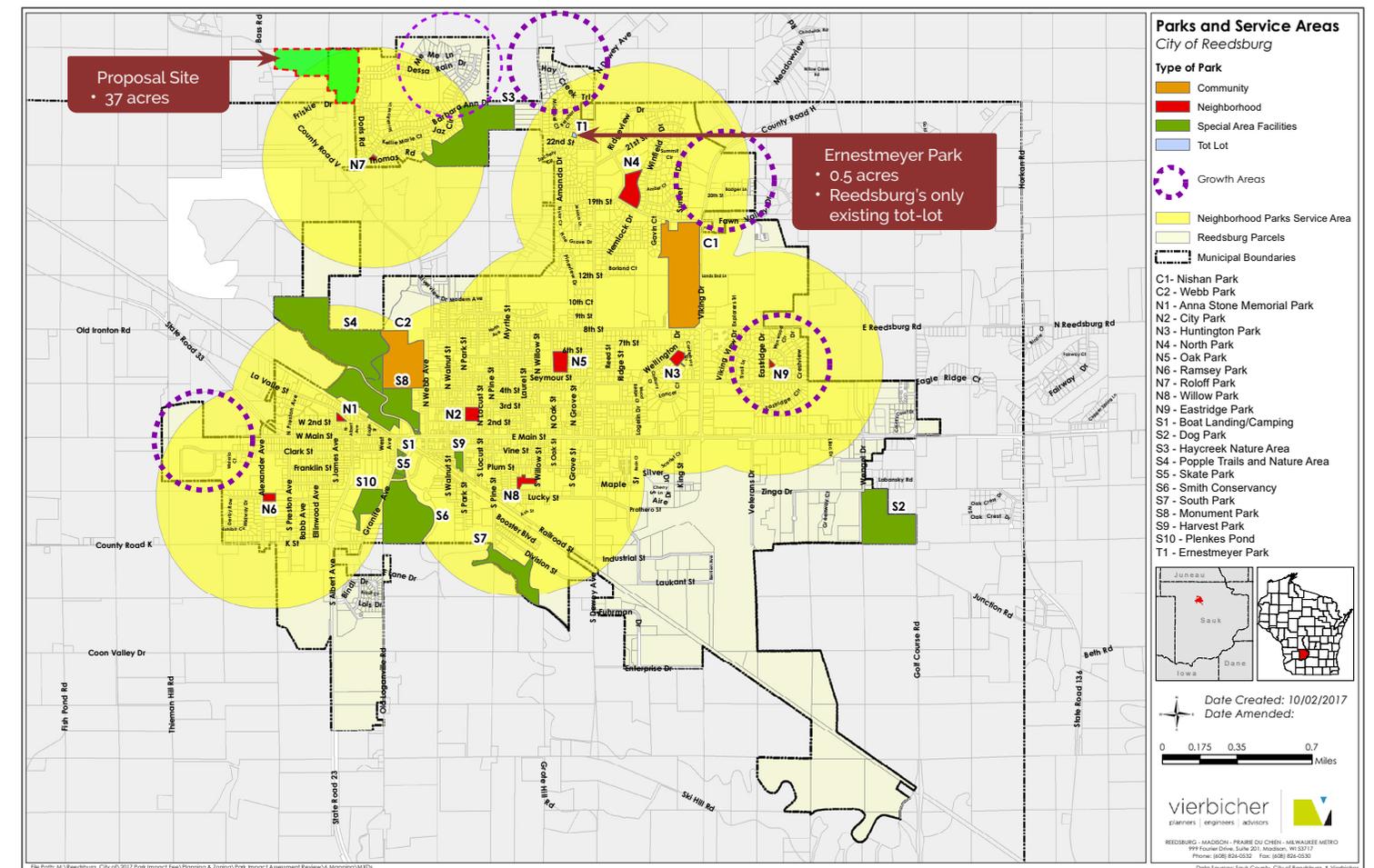
	Acres	Acres/1000
Community Parks	77.21	8.32
Serving the entire Reedsburg community, including the surrounding township		
Neighborhood Parks	21.06	2.27
Serving the immediate neighborhood - a ten minute walk or less		
Tot Lots	0.55	0.06
Facilities catering to children aged 1-6 years old		
Special Facilities	231.77	24.96
Facilities dedicated to specific uses, including but not limited to restoration areas, ice rinks, and boat launches		
Total	330.59	35.60

Facilities Analysis (above)
 In terms of recreational amenities, Reedsburg compares very well to national standards, exceeding the metric in most categories. However, this assessment overlooks a few key pieces of information: Reedsburg draws a large baseball-playing population from outside the city, which puts additional stress on those facilities. Additionally, while the number and size of playgrounds in general is very good, these facilities are largely concentrated in the center of the city and do not adequately serve the entire population.

Park Acreage/1000 People (left)
 With over 300 acres of designated park land, Reedsburg blows the national standard of 10.5 acres/1000 people out of the water. However, much of this park land is in the form of nature preserves and other park designations that lack structured recreational amenities, and again much of this park land is concentrated in the central and southern portions of the city.

Figure 6.02 - Facilities Surplus and Deficiency Compared to NRPA Standards; Source: Pranikoff, 2019

EXISTING PARK FACILITIES



Our proposal site lies on the northwestern-most corner of the City of Reedsburg. Locating a park here would extend the park service area and relieve pressure from Roloff Park, the nearest neighborhood-scale park. The site is also adjacent to an identified area of growth in the city, making it a prime location for Reedsburg's third community-scale park.

Additionally, introducing another tot-lot in any part of the city would reduce the pressure on Ernestmeyer Park, the only currently existing tot-lot in the parks system.

Figure 6.03 - Park Service Areas and Identified Areas of Growth; Vierbicher 2017

CONNECTING SAVANNA PARK TO THE COMMUNITY

Existing Parks Character

Nishan Park



Nishan Park is the most visited park in Reedsburg. It is home to 2 softball fields, 3 Little League fields, and the city's only regulation baseball diamond. This is also the location of the Reedsburg Area Community Arena, a multi-use facility for hockey and other events. This park can host a variety of community and regional events thanks to its three picnic shelters, barbecue pit, and two restroom facilities. The park also contains a sand volleyball court and two playgrounds, as well as a tractor pull area which is used during the Reedsburg Butter Festival.

Webb Park



Webb Park is adjacent to Webb Middle School. The park is home to the Webb Swimming Pool, tennis courts, and a new play structure.

Oak Park



Oak Park is another highly-used park at the neighborhood scale. The park currently hosts a regulation Little League field, a new basketball court, a new tennis court, and several pieces of play equipment. Oak Park hosted the inaugural Little League game in 1951.

Ernestmeyer Park



Ernestmeyer Park is the only tot-lot in Reedsburg, catering to children ages 1- to 6-years-old. The park contains a small play structure. It is in a higher density part of the city and thusly is quite heavily used.

Roloff Park



Roloff Park is the nearest park space to the proposed Savanna Park. It contains a medium-sized play structure.

NEIGHBORHOOD & DOWNTOWN CONNECTIONS

Legend

- City Boundary
- Site Boundary
- Water Bodies
- Existing Parks

Township residences

- Directly adjacent to site
- Not within City of Reedsburg
- City indicated a less-than-ideal relationship with these homeowners re: the park.

Immediate service area

- Multi-family residential
- New development
- Primarily low-medium income

Downtown district

- Small and local businesses
- Locations for city and regional events
- Semi-walkable area



Figure 6.04 - Reedsburg Community Context Map; Pranikoff, 2019

Existing Trails Connections

The "400" State Trail

The "400" State Trail owes its name to the "400" train that ran the 400 miles between Chicago and Minneapolis/St. Paul in a record-breaking 400 minutes in the 1930's through the 1960's.



"400" State Trail in Fall; 400statetrail.org

Today, those same tracks serve as a multi-use trail that runs from Reedsburg to Elroy, WI. While most of the trail is intended for pedestrian and bicycle traffic, there is a 7-mile equestrian path that parallels the trail from Wonewoc and LaValle. The trail also permits snowmobiling during the winter months. The trail comes into Reedsburg alongside State Road 33/Main Street. This is the only dedicated hiking trail that connects to the city.

Reedsburg Bike Paths and Trails

Reedsburg classifies most of its public roads as a part of the bike route, however it lacks dedicated bike lanes. This lack of connectivity poses challenges regarding connecting our site to the greater Wisconsin trail system.

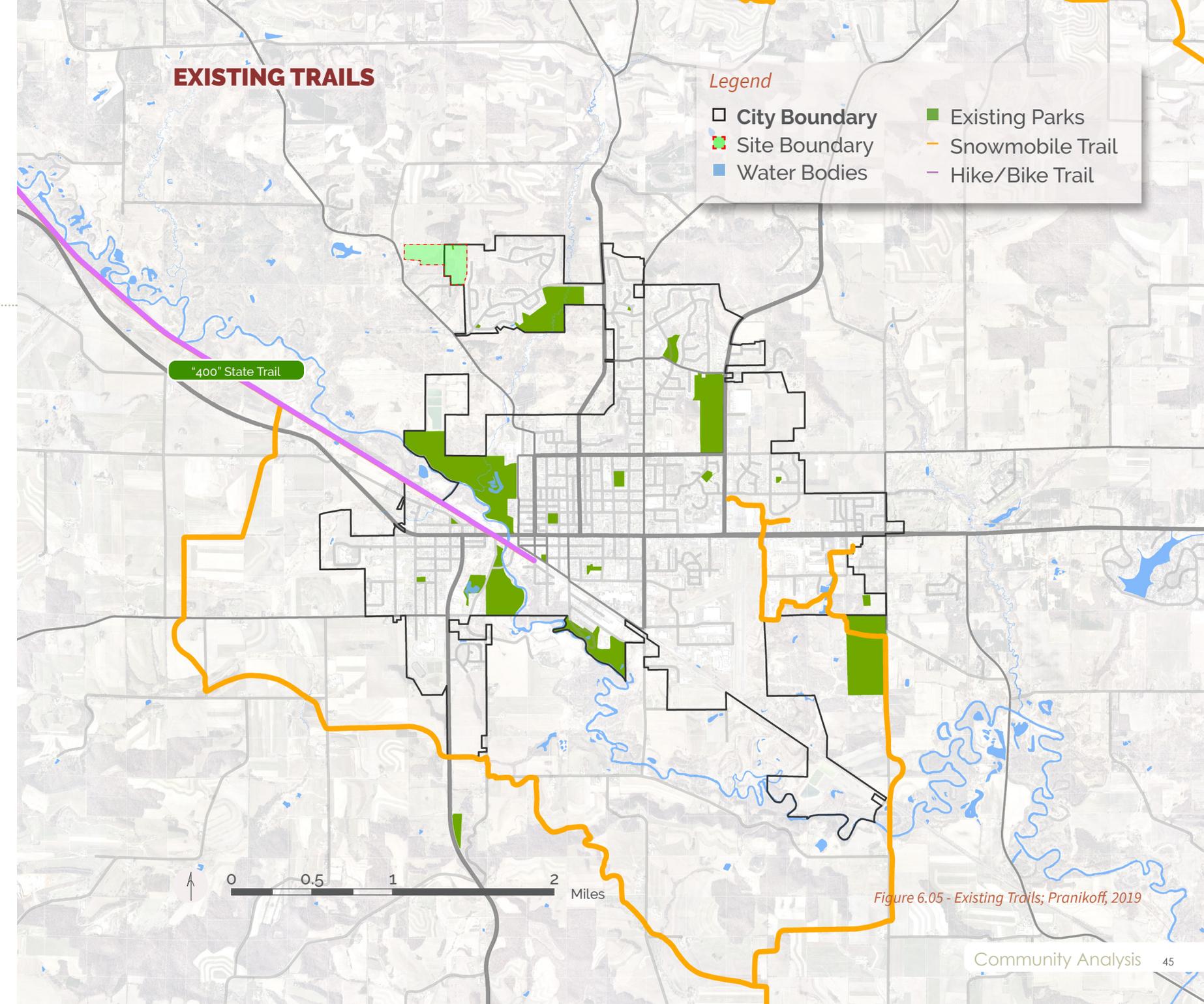


Figure 6.05 - Existing Trails; Pranikoff, 2019

Existing Site Access & Circulation

East Entrance: Dessa Rain Drive



The existing entrance to the brush site is located at the intersection of Doris Road and Dessa Rain Drive. Signage leading into the site is currently nonexistent, leading to poor legibility. These neighborhood streets are new and have sufficiently wide sidewalks for safe and reliable pedestrian access to the site.

This will likely be the primary entrance to the site for community members, so it will be vital to develop a more inviting entrance to the park.

West Entrance: County Highway V



Access to the west side of the site is currently via a mown grass road leading directly off of Highway V. Because there is currently no program here, there is no signage at this side of the site.

County Highway V is a heavily trafficked road with a 55 mile-per-hour speed limit and no sidewalk or bike lane, making pedestrian access via this route treacherous. Developing a more pronounced entrance with traffic calming will contribute greatly to creating a more safe interface between the site and County Highway V.

Existing Grass Road



The existing road leading into the west side of the site is uncompacted soil with medium-length grass. This path tends to become pitted and muddy for most of the year, making access difficult without a truck.

Existing Forest Path



There is one existing trail into the forest, however it is unmarked and legibility is poor. There is no indication of the transition into neighboring private yards.

EXISTING ACCESS & CIRCULATION

Legend

- City Boundary
- Site Boundary
- Water Bodies
- Access Points
- Vehicular Circulation
- Pedestrian Circulation
- Limited Access Drive

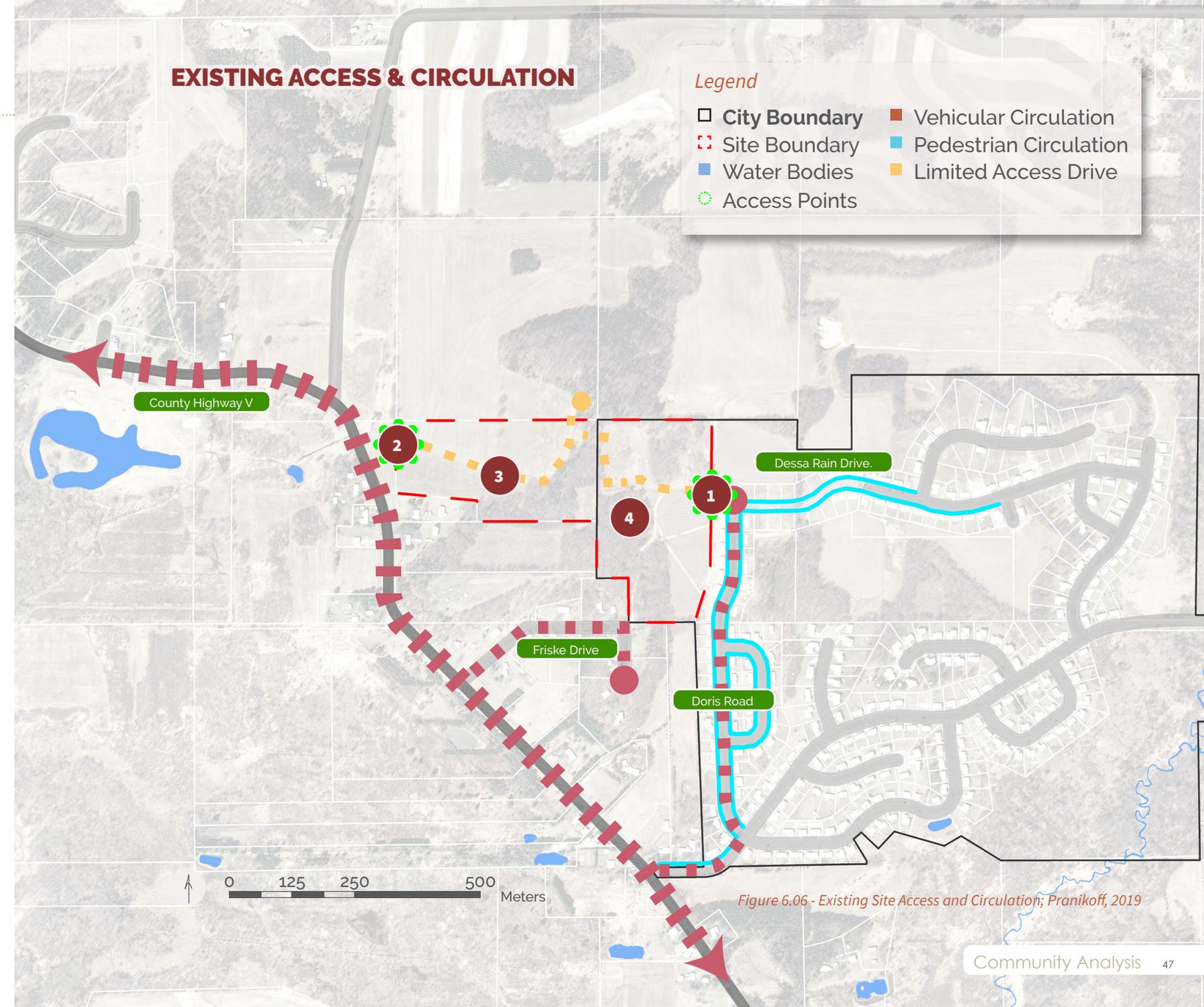


Figure 6.06 - Existing Site Access and Circulation; Pranikoff, 2019

Zoning

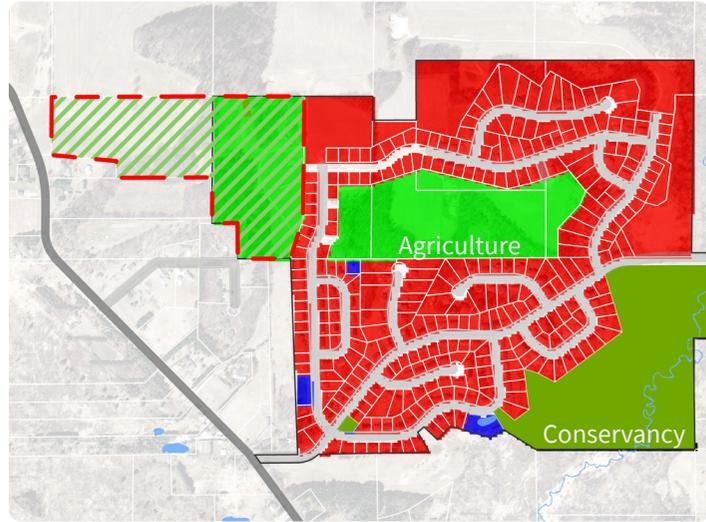


Figure 6.07 - Site Adjacent Zoning (NTS); Pranikoff, 2019

Legend

- R3 Residential
- Agriculture
- Conservancy
- Government

Site Adjacent

To the east of the site lies R3 Residential zoning, which is the highest density permitted in Reedsburg. Many of these homes support multiple families or multiple-generation families. Generally, these homes cater to medium income residents with younger children.

On Site

The eastern half of the site is currently zoned for agriculture, and the western half is newly annexed land that has yet to be incorporated. It is likely that the entire site will be reclassified as conservancy.

Flooding

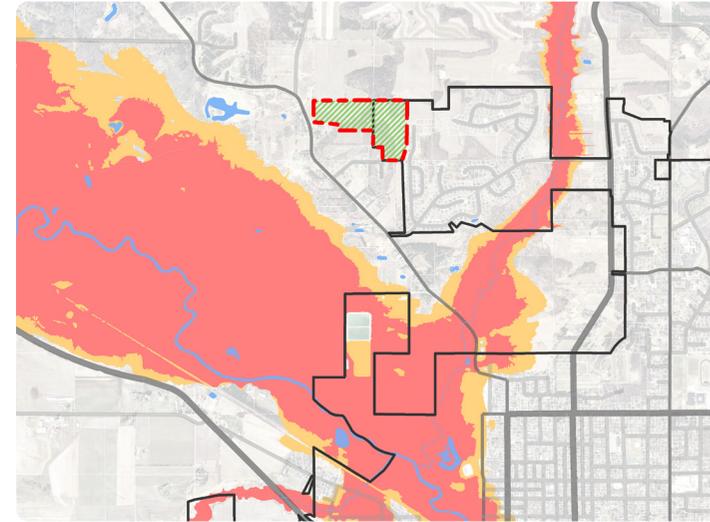


Figure 6.08 - FEMA Flood Zones (NTS); Pranikoff, 2019

Legend

- 100-year flood
- 500-year flood
- Site Boundary
- Waterbody

Baraboo River Floodway

Our site lies safely outside both the 100- and 500-year flood zones for the Baraboo River. However, with the ever-changing nature of today's climate flooding is becoming increasingly severe. As always, it is important to consider the future of the site and prepare to exceed the current needs.

On Site

Although the site generally does not suffer flooding issues caused by the Baraboo River, community members have indicated that local flooding occurs during periods of heavy rain and snow melt. This will be addressed through regrading, soil improvements, and storm water capture devices on site.

SITE OPPORTUNITIES & CONSTRAINTS

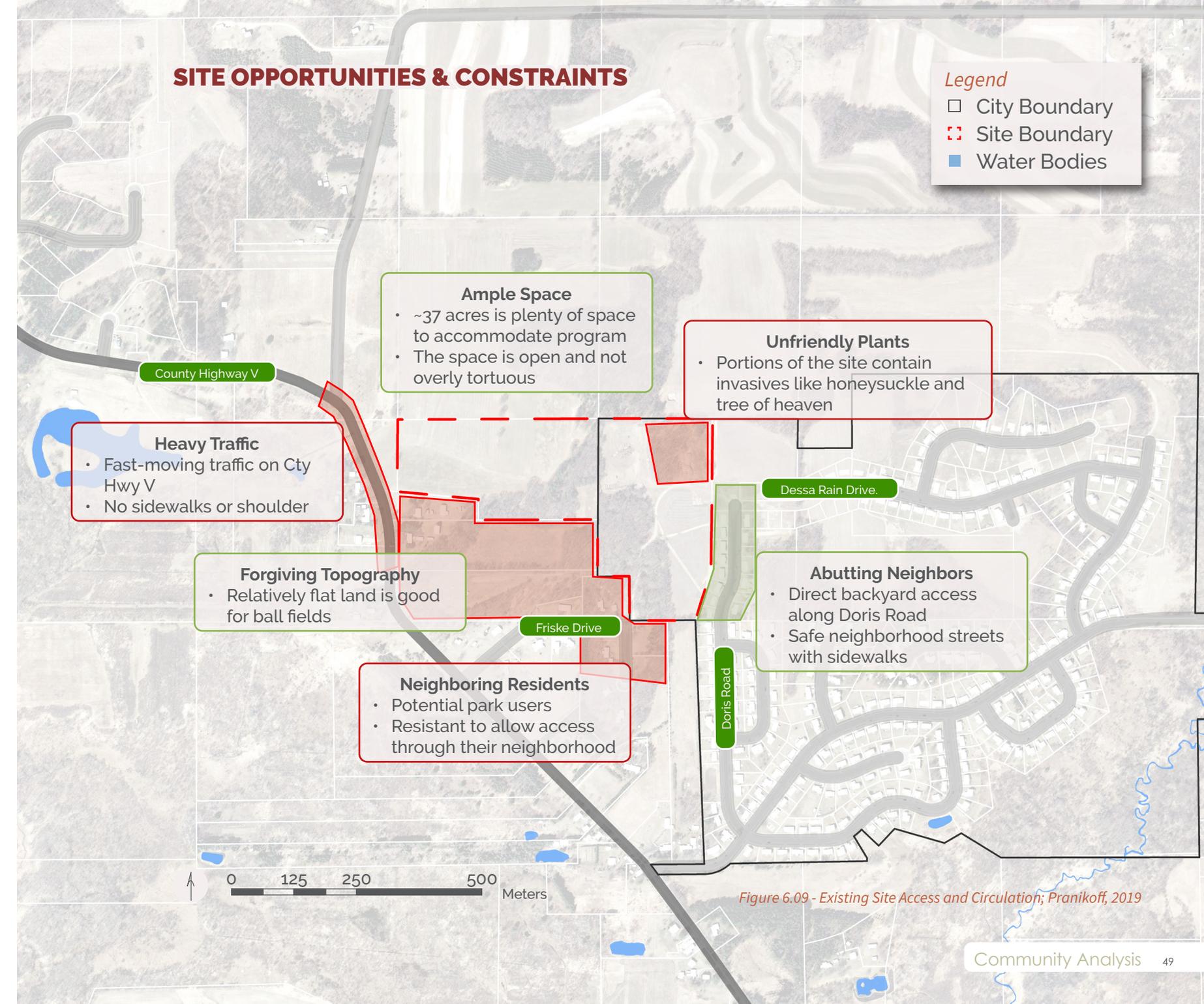


Figure 6.09 - Existing Site Access and Circulation; Pranikoff, 2019

SITE

INVENTORY, ANALYSIS, & SPATIAL PLANNING



EXISTING CONDITIONS

Soil Inventory

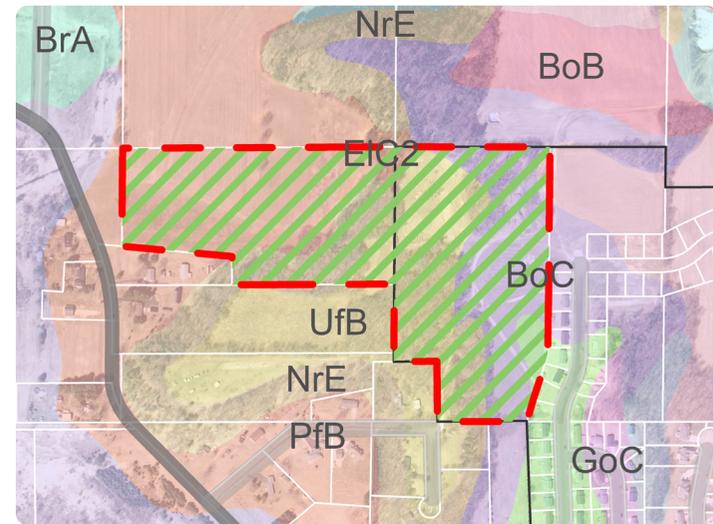


Figure 7.01 - Soil Inventory (NTS); Pranikoff, 2019

Dominant Soils on Site:

BoC Boone Sand	UfB Urne Fine Sandy Loam
EIC2 Elva Sandy Loam	NrE Norden and Elva Soils and Rock Outcrop

Soils Analysis

Soils on the site are dominated by sandy loams and rocky intrusions. Generally speaking, these soils are not well drained and not well suited for construction. Compacted and poorly drained soils contribute to localized flooding during heavy rain and snow melt events.

Topographic Inventory

Topography

The site has a topographic change of about 76 feet, with the highest point in the south central portion of the site and the lowest point in the northwest corner. The space is largely divided into two parts by a ridge running southwest to northeast across the eastern third of the site.

The severe topography change in the center of the site may pose design challenges due to its steep incline. However, this topography gives us the opportunity to tackle storm water at the top and bottom of the site, increasing the total amount of infiltration we can create.



Longitudinal Ridge Through Site Center; Pranikoff 2019

Water Flow

While the site does not experience flooding from nearby rivers, community members have indicated that localized flooding is common. Water on the site currently flows primarily from the south central region out the southeast and northwest corners. Capturing storm water at the top of the site will be the most effective method of mitigating flooding, preventing water from ever reaching the flatter lowlands.

TOPOGRAPHY & WATER FLOW

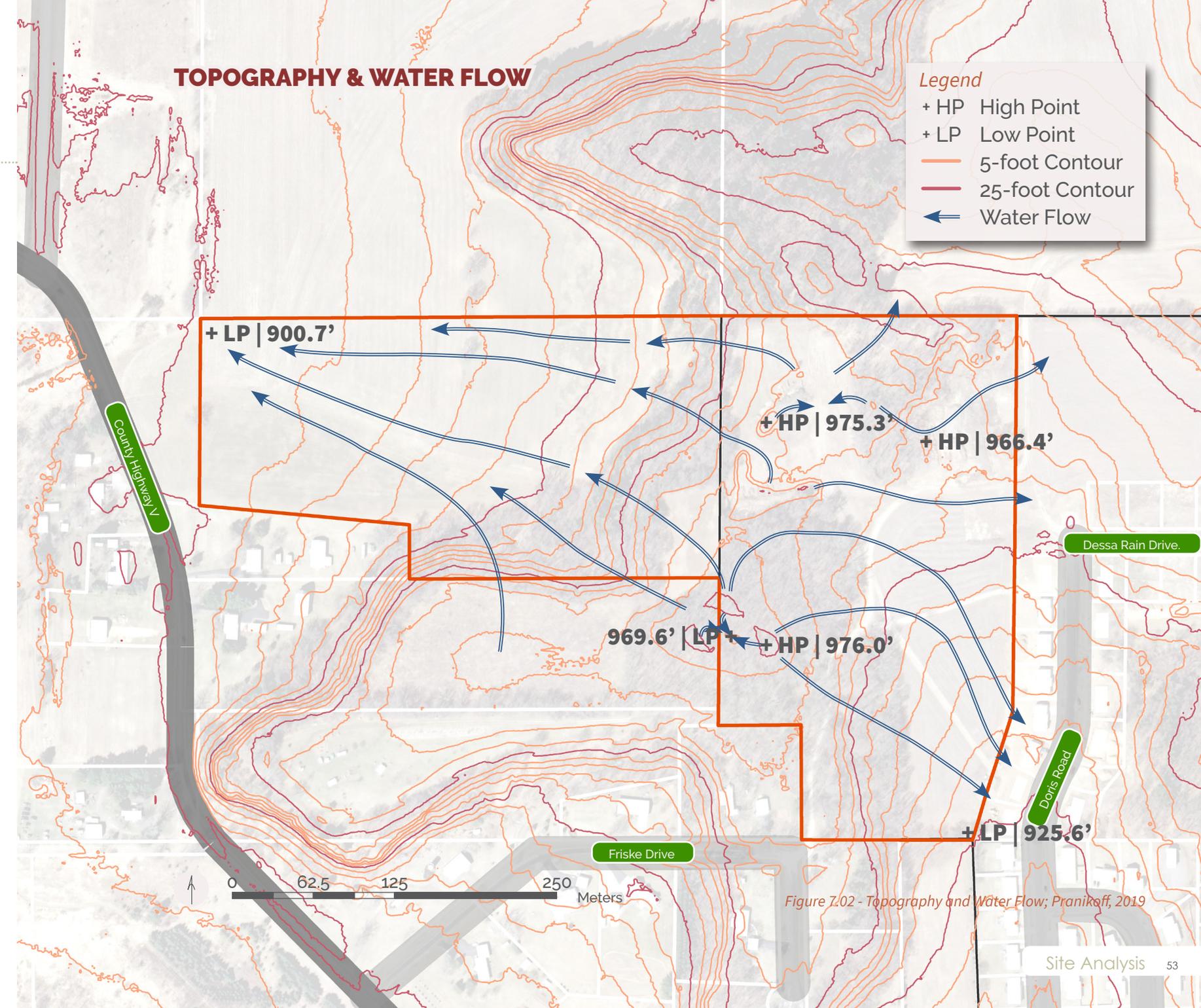


Figure 7.02 - Topography and Water Flow; Pranikoff, 2019

Land Cover



Agriculture

49.7%

Disused agricultural fields account for just under half of the current site. Because it is primarily flat and open, agricultural land will likely be a good place to locate ball fields and new open space. Agricultural land that does not become developed shall be converted to pollinator habitat.



Compacted Soil

6.0%

Portions of the site around the brush pile and archery range are bare compacted soil. Water infiltration in these areas is poor, and they are contributing to local flooding problems on the site. If these areas are not redeveloped, the soil will need to be amended to improve infiltration.



Forest

40.3%

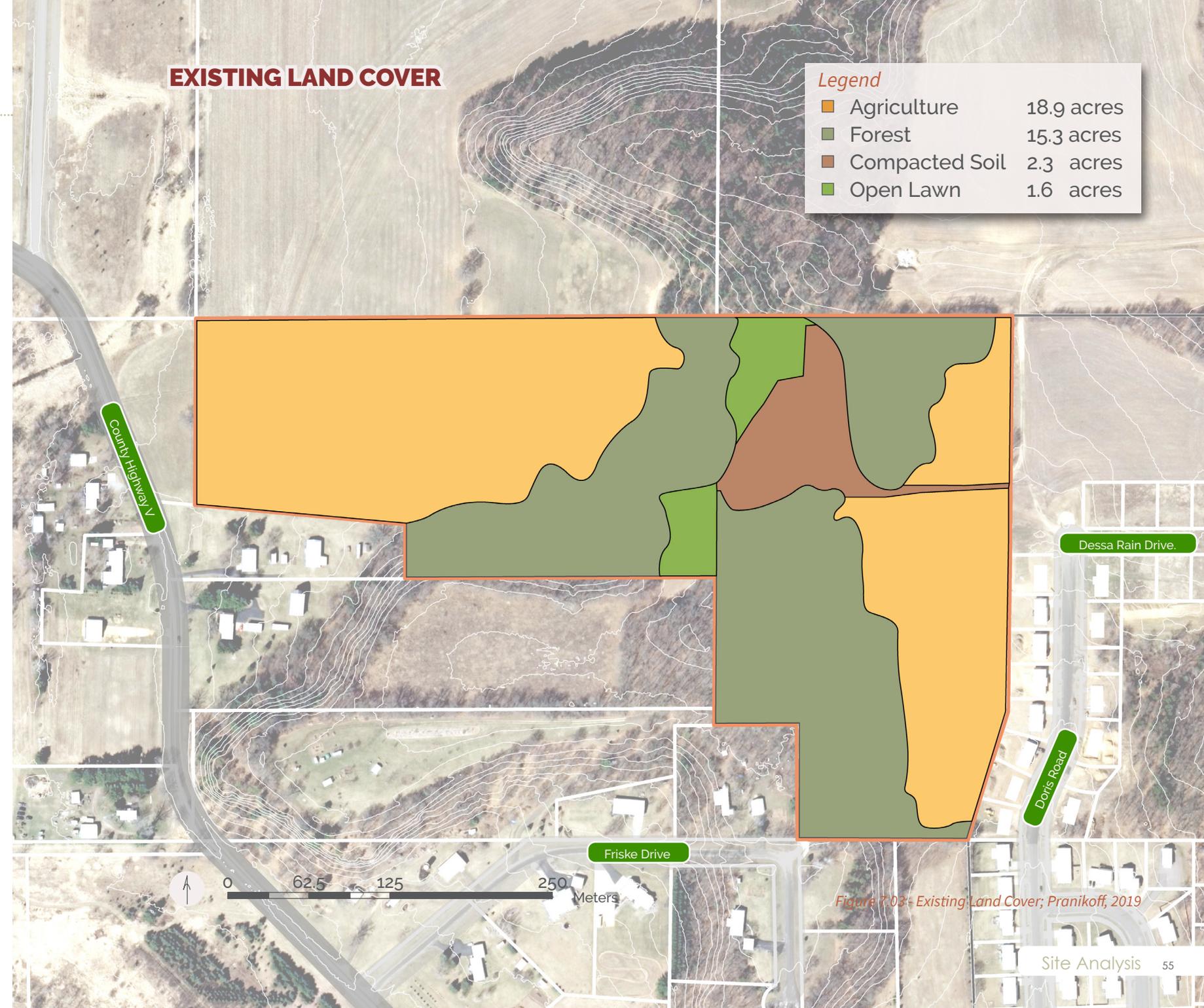
A large portion of the site is remnant oak savanna or a combination of coniferous and deciduous forest. While parts of the existing forest are encumbered with invasive species, we will aim to preserve as much of the forest as possible.



Open Lawn

4.0%

A small portion of the site is open lawn, primarily at the periphery of the brush pile. These areas are typically muddy and poorly drained. If they are not otherwise redeveloped, they shall be converted to pollinator habitat.





PLANNING THE SPACE

Programmatic Anchor Zones

Defining Anchor Zones

A few key program elements are influenced by elements beyond the site conditions, such as input from the community, standards for safety, and stewardship to the environment. Program elements defined by anchor zones will be consistent across all iterations of the design.

Improving Safety: Brush Pile

A major concern for residents in the adjacent neighborhood is truck and trailer traffic using the neighborhood roads as access to the brush dumping site. Especially with a new playground and tot-lot being installed, reducing threatening traffic on Doris Road and Dessa Rain Drive is critical in ensuring the safety of the park users. For this reason, it is imperative that the brush pile be moved to the northwestern portion of the site, such that truck and trailer traffic is redirected to County Highway V.

Increasing Access: Playground

One of the critical goals of this project is enhancing the newly developed neighborhood adjacent to the site. To ensure that neighborhood residents can readily access the playground amenities, at least one playground area must be placed adjacent to the neighborhood.

Enhancing the Ecosystem: Forest

One of the site's most valuable assets is the existing forest. In addition to developing new habitat on the site, we must preserve the forest to the best of our ability. As the city continues to grow around the park, the economic and ecological value of forested areas will only increase.



Figure 7.04 - Existing Site Access and Circulation; Pranikoff, 2019

Spatial Plan 1



Program Development

This plan develops two main centers of activity: the eastern baseball-playground complex and the western recreation center-sports complex. On the east side of the site, the playground is separated from other program with its own parking lot, making it easier for parents to come and go to the playground. There is also a dedicated parking lot for the eastern baseball diamond. On the west side of the site, there is dedicated access to the brush pile with a green space buffer between the brush pile and the recreation center. This should reduce the effects of loud sounds and displeasing lines of sight due to the brush pile and mulching facility.

In addition to meeting all of the programmatic needs of the Reedsburg community, this plan creates options to buffer the site from township residences who have expressed concerns over having a new park in their back yards.

Circulation

A key feature of this spatial study is access to the site via a traffic circle at each entrance. Traffic circles slow down incoming traffic, while also addressing tricky circulation to and from potentially contending program areas. In this plan, traffic to the brush pile is entirely separated Doris Road and Dessa Rain Drive, eliminating the regular threat of trucks and trailers driving through the neighborhood. Recreation center parking is also only accessible via County Highway V, further reducing the amount of traffic flowing through the neighborhood streets.

SPATIAL PLAN 1

Legend

- Athletic Field
- Playground
- Improved Open Space
- Brush Pile
- Parking Lot
- Building
- Walk/Hike Trail
- ➔ Vehicular Circulation

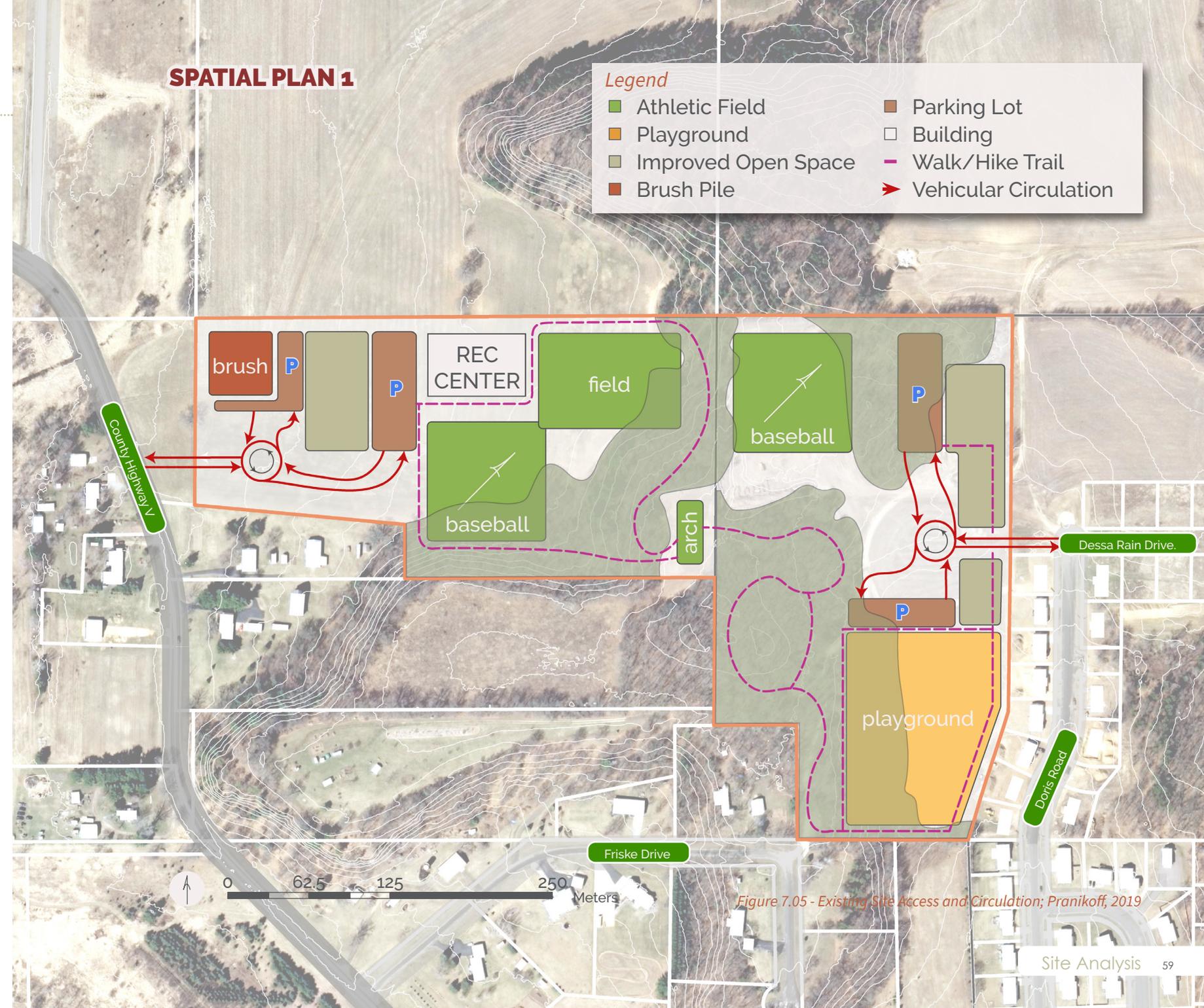


Figure 7.05 - Existing Site Access and Circulation; Pranikoff, 2019

Spatial Plan 2



Program Development

Program in the plan is grouped into two facilities: the baseball complex and the recreation center-sports complex. In this plan, two baseball diamonds are arranged around an out-building that can be used for concessions, restrooms, and information. On the east side of the site, the recreation center, turf field, and archery range are clustered. Grouping other activities around the recreation center allows it to act as a “home base” for other program in the park.

This plan offers less physical separation from between the brush pile and other program elements, but superior separation of the site from the township residences. It features an additional open green space to the south of the main playground area.

Circulation

The dominant element of this plan is through-access from County Highway V to Dessa Rain Drive. While this may increase traffic in the neighborhood slightly, community members have expressed interest in having an additional route into the neighborhood that is less circuitous than coming in from the south end. The through street offers access to all of the parking lots on the site as well as the brush pile.

The trail infrastructure in this plan is more robust, with additional trails located in the southern portion of the site

SPATIAL PLAN 2

Legend

- Athletic Field
- Playground
- Improved Open Space
- Brush Pile
- Parking Lot
- Building
- Walk/Hike Trail
- Vehicular Circulation

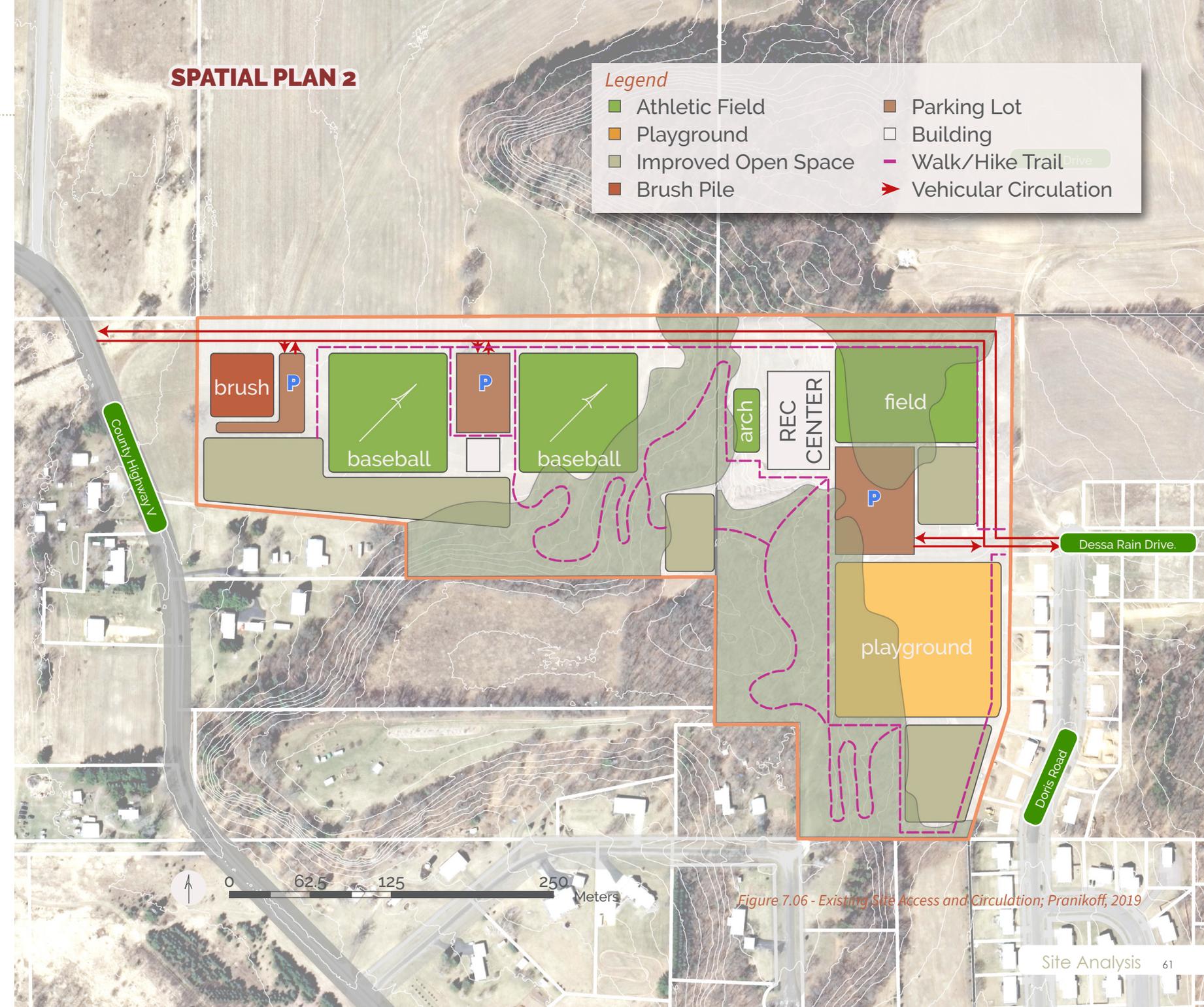
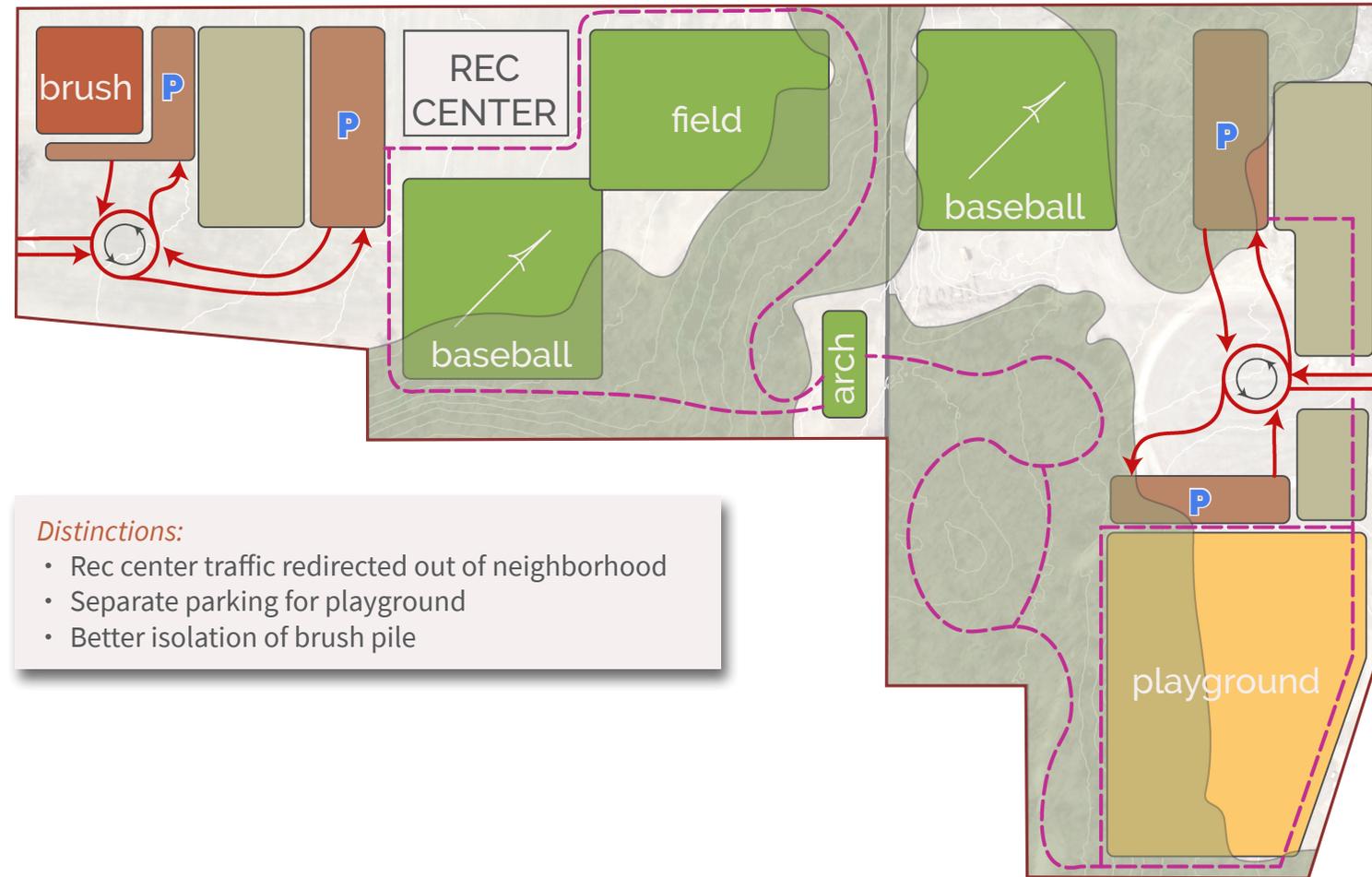


Figure 7.06 - Existing Site Access and Circulation; Pranicoff, 2019

COMPARING TWO SPATIAL PLANS

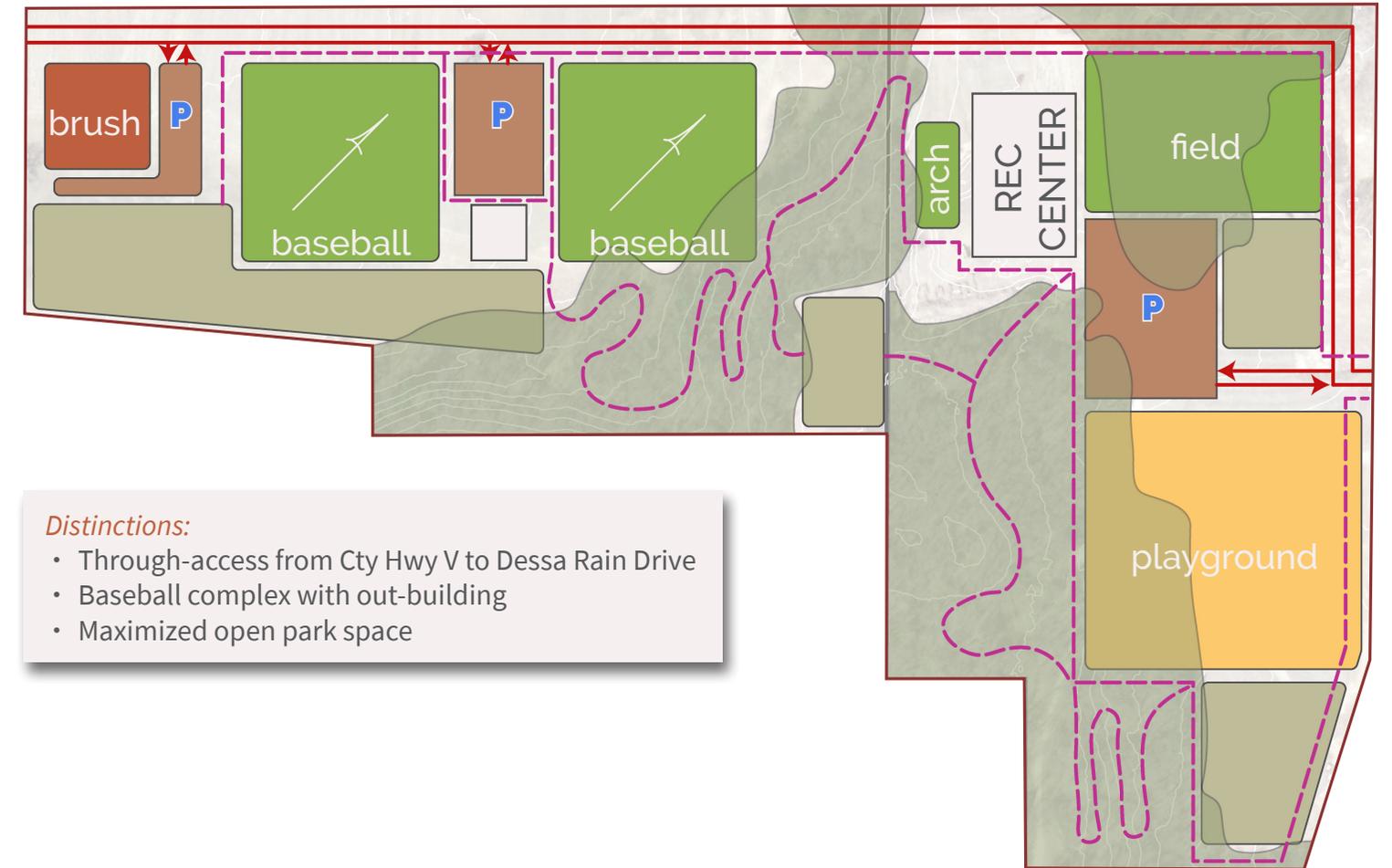
Spatial Plan 1



Distinctions:

- Rec center traffic redirected out of neighborhood
- Separate parking for playground
- Better isolation of brush pile

Spatial Plan 2

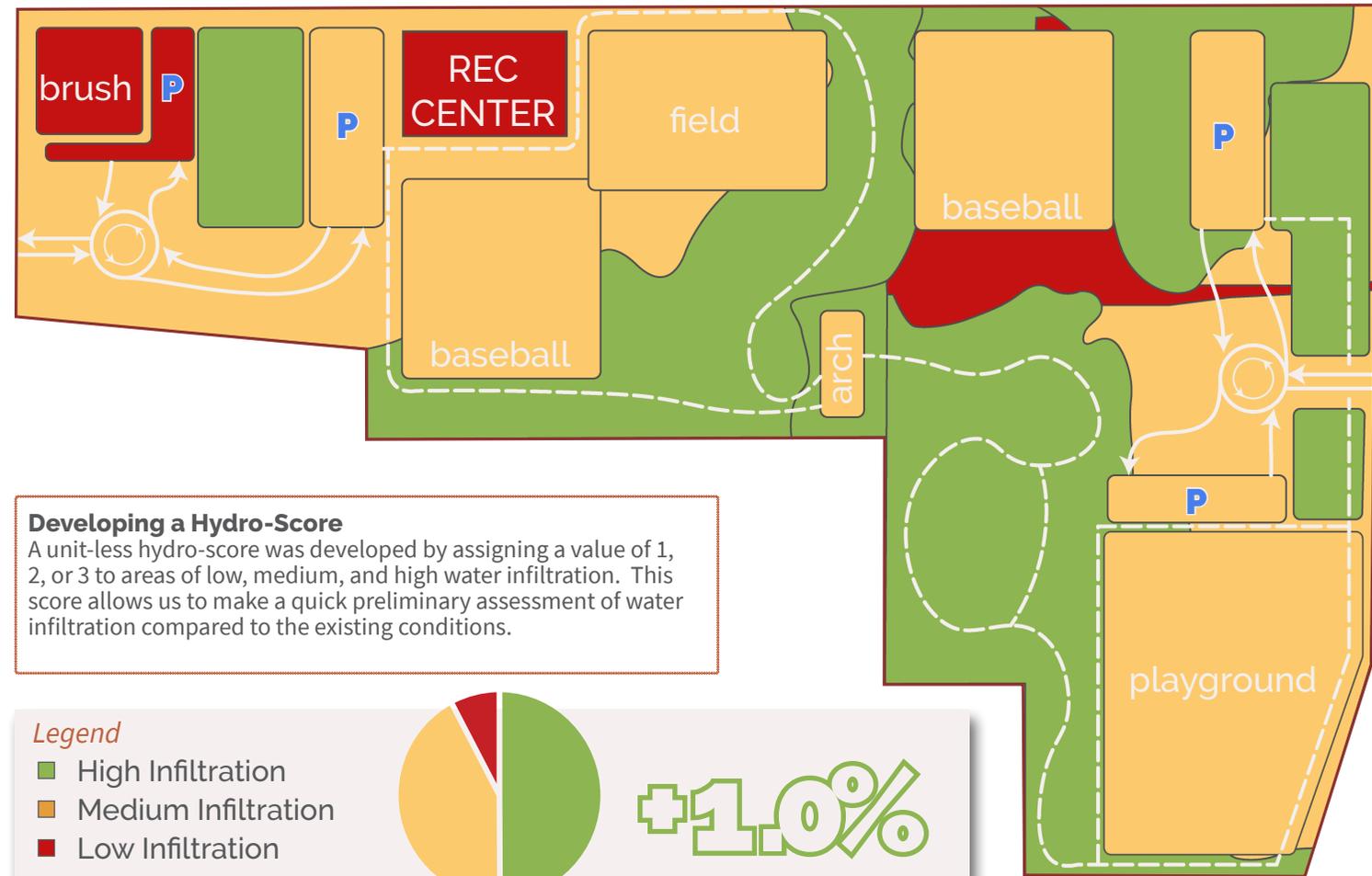


Distinctions:

- Through-access from Cty Hwy V to Dessa Rain Drive
- Baseball complex with out-building
- Maximized open park space

Figure 7.07 - Spatial Plan Comparison; Pranicoff, 2019

Spatial Plan 1



Spatial Plan 2

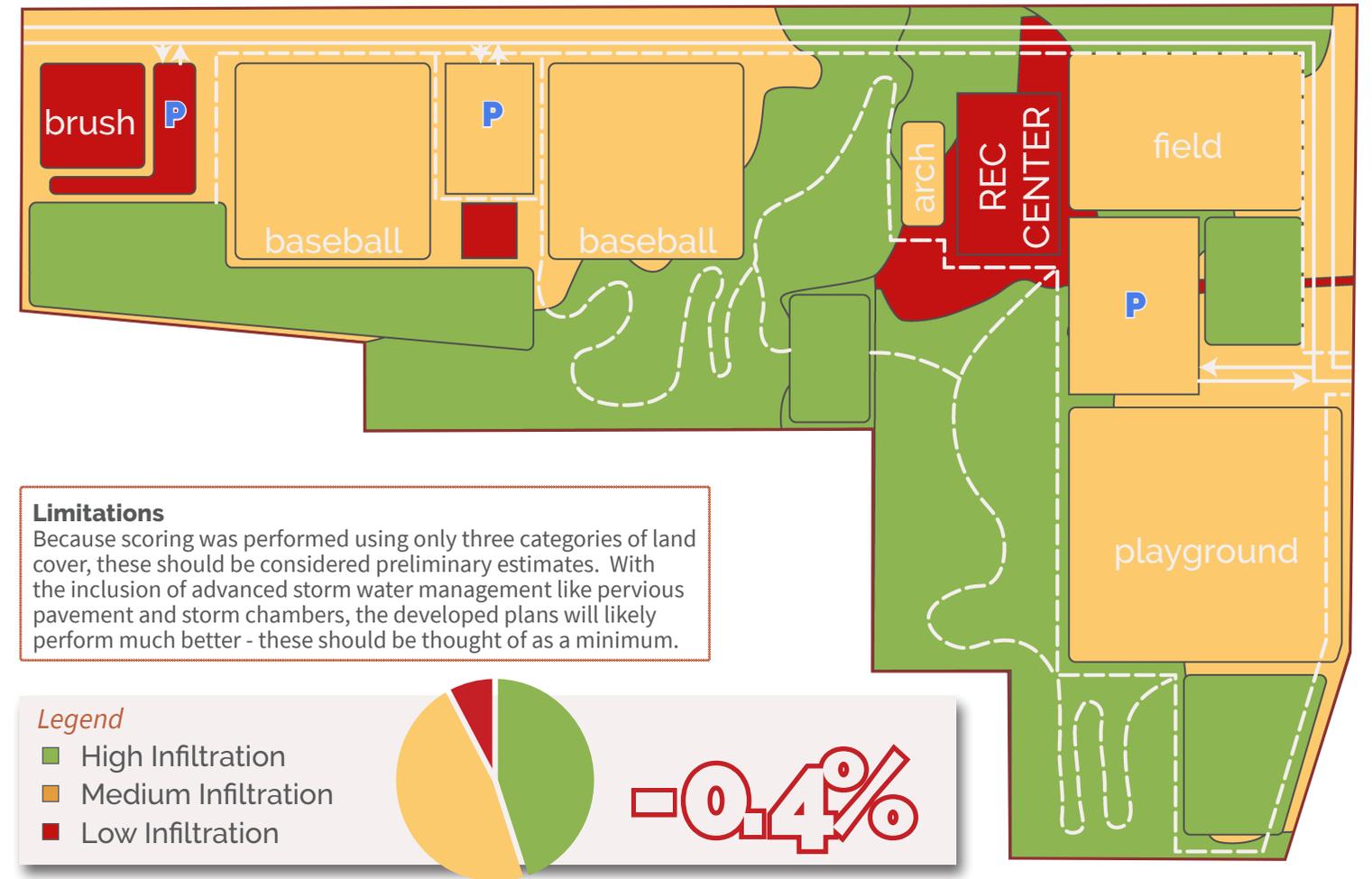


Figure 7.08 - Spatial Plan Water Infiltration Comparison; Pranikoff, 2019

SEMESTER 2

JANUARY 2020 - MAY 2020

DESIGN STRATEGIES



IMPLEMENTATION



REFLECTION



MASTER PLAN

28.5% **17.6%** **13.3%**

Forest
Preservation

Restored
Prairie

Permeable
Pavement

1,505,000 cubic feet
of storm water holding capacity

MASTER PLAN

Figure 8.01 - Master Plan; Pranikoff, 2020

Program Elements

- ① Revised entrance to the city brush pile
- ② Combined athletic fields
- ③ West oak savanna
- ④ Forest trail system with scenic overlooks
- ⑤ Upper picnic area & event space
- ⑥ Dedicated bus drop-off & parking area
- ⑦ Raised plaza with built-in bleachers & seating
- ⑧ Universally accessible playground
- ⑨ Half-court basketball & wall game space
- ⑩ Universally accessible ball field
- ⑪ Lighted outfield gabion wall & scoreboard
- ⑫ Eight-target archery range with bow rack
- ⑬ Savanna Park Drive
- ⑭ Traffic circle, fountain, & welcome signage
- ⑮ Walkable oak savanna with observation platforms



DEVELOPING THE MASTER PLAN

Overview

Developing a master plan is like writing an outline for a term paper with the needs of the community as the prompt. Over several meetings, the City of Reedsburg administration offered insight to understand what program would best serve the residents of the community and neighborhood.

Meeting Community Needs

The most important aspect of the master plan is making sure that it adequately addresses the needs of the neighborhood, community, and environment. This plan retains and improves the existing program while also introducing valuable new social resources to the community. Advanced storm management practices make the plan sustainable moving forward.

Park Zones



Baseball Complex

- League-sized baseball diamond to accommodate all game types
- Integrated storm water management BMPs



Brush Pile

- Location encourages safer neighborhood traffic patterns
- Raised base provides improved drainage



Playground

- Six universally-accessible play zones
- Changes in topography offer unique views for the park's small visitors



West Prairie / Flexible Fields

- Pollinator-friendly plants provide valuable habitat
- Open-ended plan allows for a flexible response to future development



East Prairie

- Pollinator-friendly plants and birdhouses provide valuable habitat
- Trails connect the park to neighboring residences while preserving a sense of privacy



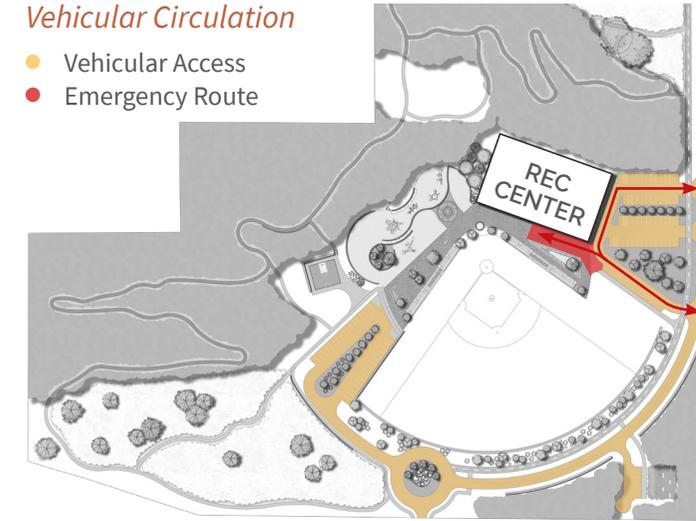
Forest Preserve

- Preserved and improved forest maintains the habitat corridor through the site
- A variety of trails provide access for all abilities

Circulation

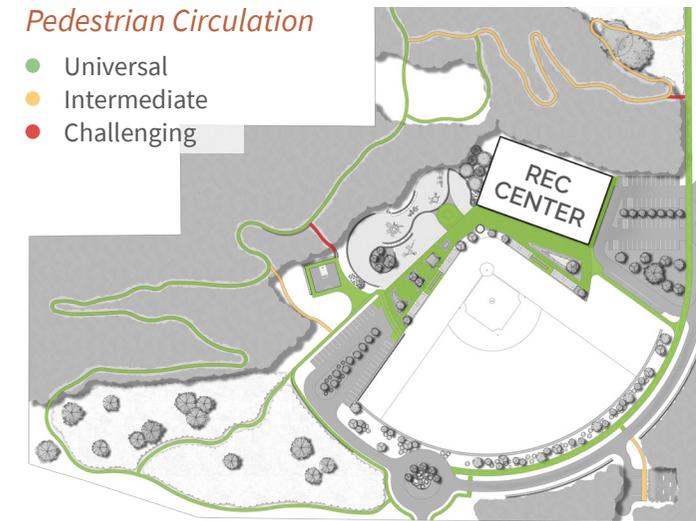
Vehicular Circulation

- Vehicular Access
- Emergency Route



Pedestrian Circulation

- Universal
- Intermediate
- Challenging



Entry and Parking

- East entry traffic circle creates a safe entry to either parking lot
- Angled access to the brush pile discourages access from the neighborhood side

Emergency Access

- The plaza is sufficiently strong to support the weight of a fire engine or ambulance, allowing access on two sides of the recreation center
- The bus drop-off lane allows for an emergency vehicle to easily maneuver in and out of the site

Access

- All areas of Savanna Park are universally accessible, including the baseball diamond and upper picnic area
- Access is provided to neighborhood residents whose back yards abut the site via a trail through the East Prairie

Forest Trails

- The forest trails provide foot traffic circulation throughout the entire site
- Trails are categorized into Universal, Intermediate, and Challenging, based on slope steepness and use of stairs

Figure 8.02 - Pedestrian and Vehicular Circulation Diagrams; Pranicoff, 2020

PLANTING DESIGN

Overview

Savanna Park contains five main planting motifs: the oak savanna, the lowland prairie, the remnant forest, park trees, and plant buffer zones. Each zone either supports the original vegetation of the area, or serves to reduce the impact of the development on the environment and community.

Plant Selections

Buffer Zones

Buffer zone plants are employed in areas around the park that require physical or perceptual separation from their surroundings, such as along certain property lines or surrounding the brush pile.

Plants selected for these areas include:

Pinus resinosa (red pine)

Quercus acuminata (chinkapin oak)

Salix alba ‘Britzensis’ (golden weeping willow)

These plants were chosen because they have thick foliage that prevents disruptive noise from the brush chipping. Red pine is especially resistant to deer browsing (a common problem in the area identified in a meeting with community leaders) ensuring that the buffer will be effective even in the winter.

Park Trees

These plants make up the culture inside the main park areas, including in the plaza and parking lot planting areas and along the outfield wall and bike path.

Plants selected for these areas include:

Amelanchier x grandiflora ‘Autumn brilliance’ (‘Autumn

Brilliance’ serviceberry)

Cercis canadensis (eastern redbud)

Cornus sericea (red twig dogwood)

Corylus americana (American hazelnut)

Cotinus coggygria (smoke tree)

Rhus typhina (staghorn sumac)

Syringa reticulata ‘China Snow’ (Japanese tree lilac)

Ulmus x ‘Morton Glossy’ (Triumph elm)

The park trees in use in Savanna Park were selected for their form, fragrance, and support for pollinator habitat. Priority was given to trees that are already a part of Reedsburg’s typical street and park tree catalog to simplify maintenance and care. Trees resistant to disease and pests (such as Triumph elm, which resists the Dutch elm disease) were preferred also to reduce maintenance and limit the need for replacements.

Lowland Prairie Mix

This mix will be planted in the areas of the site that are known to hold water following a storm. These species are more tolerant of “wet feet” than other prairie species.

Grasses

Carex stipata (awl fruited sedge)

Scirpus atrovirens (dark green bulrush)

Forbs

Ludwigia alternifolia (seedbox)

Allium cernuum (nodding pink onion)

Eutrochium purpureum (joe pye weed)

Iris shrevei (wild iris)

Senna hebecarpa (wild senna)

Solidago rigida (stiff goldenrod)

Silphium integriflorum (rosinweed)

Helenium autumnale (dogtooth daisy)

Savanna Prairie Mix

These native species promote pollinator habitat and will help to return the park to its pre-European settlement flora. The prairie planting will also increase the efficiency of water infiltration compared to the existing agricultural field.

Grasses

Andropogon gerardii (big bluestem)

Panicum virgatum (switchgrass)

Schizachyrium scoparium (little bluestem)

Sorghastrum nutans (Indian grass)

Spartina pectinata (cordgrass)

Forbs

Allium canadense var. lavendulare (showy wild garlic)

Echinacea pallida (pale purple coneflower)

Lespedeza virginica (slender bush clover)

Liatris aspera (rough blazing star)

Maianthemum racemosum (false Solomon's seal)

Polygonatum biflorum (Solomon's seal)

Silphium laciniatum (compassplant)

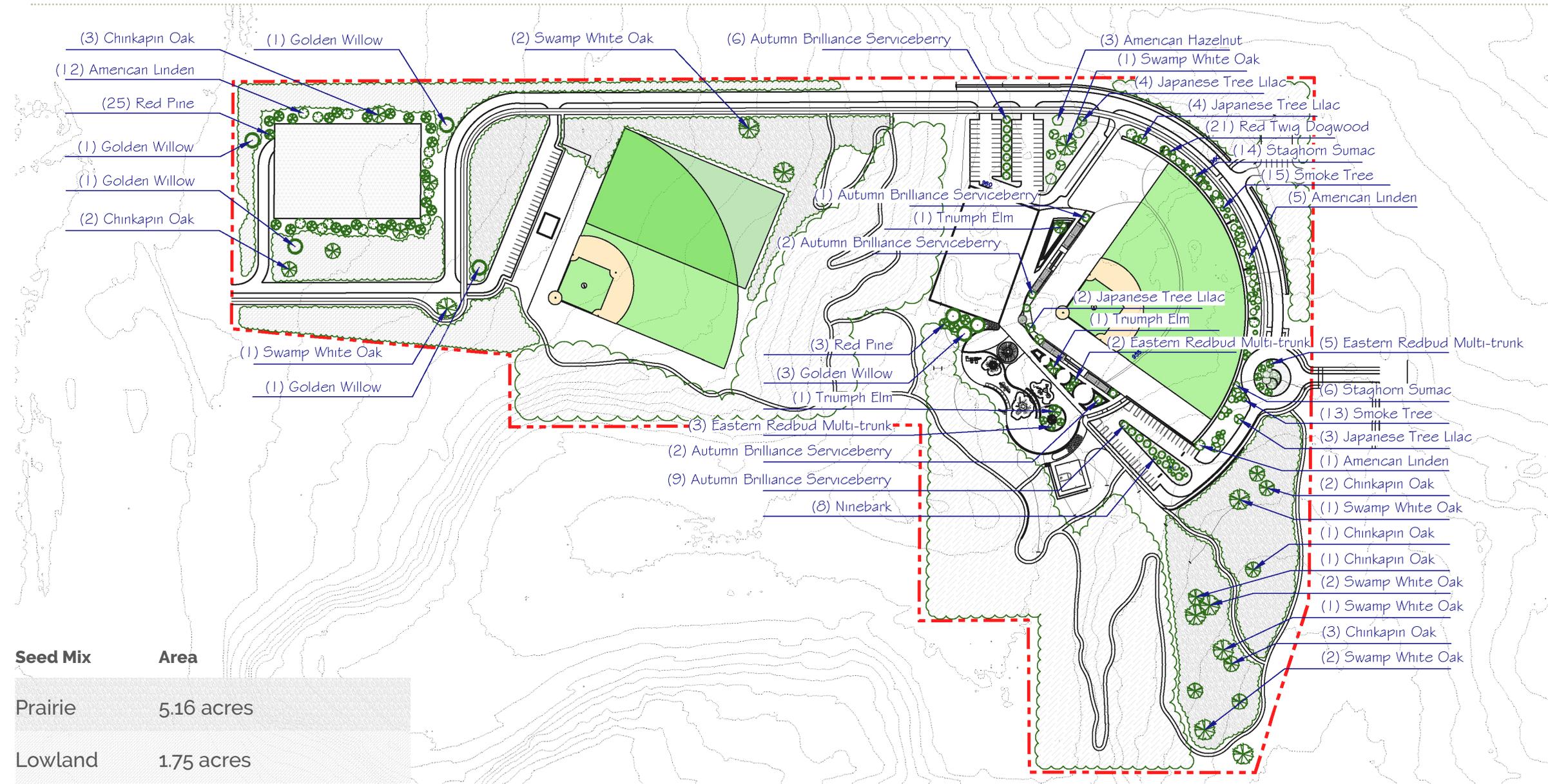
Veronicastrum virginicum (Culver's root)

Figure 8.03 - Planting Plan; Pranikoff, 2020

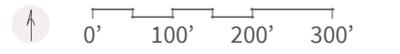
Plant Schedule

Symbol	Latin Name	Condition	Quantity
	<i>Amelanchier x grandiflora</i> 'Autumn Brilliance'	15 gal	20
	<i>Cercis canadensis</i>	15 gal, multi-stem	10
	<i>Cornus sericea</i>	5 gal	21
	<i>Corylus americana</i>	3" cal. B & B	3
	<i>Cotinus coggygria</i>	5 gal	28
	<i>Physocarpus opulifolius</i>	5 gal	8
	<i>Pinus resinosa</i>	15 gal	28
	<i>Quercus acuminata</i>	5" cal. B & B	12
	<i>Quercus bicolor</i>	5" cal. B & B	10
	<i>Rhus typhina</i>	7 gal	20
	<i>Salix alba</i> 'Britzensis'	15 gal	7
	<i>Syringa reticulata</i> 'China Snow'	15 gal	13
	<i>Tilia americana</i>	15 gal	18
	<i>Ulmus x</i> 'Morton Glossy'	15 gal	3

Planting Plan

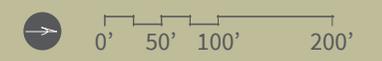


Seed Mix	Area
Prairie	5.16 acres
Lowland	1.75 acres



SITE PLAN

RATIONALE, PROGRAM, & DETAILS



DEVELOPING THE SITE PLAN

Overview

The first major construction phase of this project will include the recreation center, east baseball diamond, plaza, and playground, as well as their supporting amenities like parking and access.

Three-Tier Concept

The most complicated challenge of designing Savanna Park's main attraction was reconciling the difference between flat program elements – the baseball diamond, plaza, and building envelope – and the site's naturally very hilly topography. This unique challenge led to the development of the Three-Tier Concept: a central plaza that separates the sunken baseball diamond and raised playground.



The tiered organization affords the opportunity to build seating for the ball field directly into the plaza. By building bleachers into the plaza and working down, an unobstructed view from the recreation center to the baseball diamond is preserved and there is no need for the unsightly bleacher structures often seen at smaller diamonds. The raised playground area offers young patrons a unique vantage point.

Plaza

As the main congregative space, the winged plaza is equipped to handle a variety of different uses. With fixed and movable seating, the space is ideal for meeting with neighbors, watching a game, or having lunch on a nice day.

The large plaza features planters with soil depth great enough to accommodate large trees, which maintain the oak savanna motif and keep the plaza surface cool on hot summer days.

Storm Management

Built-in bleachers provide seating from the plaza-level down to the field-level without obstructing the view from the recreation center and plaza. The foot of each segment of bleachers is lined with crushed stone to allow water to move through the site's storm management system, keeping the plaza and bleachers free from standing water.

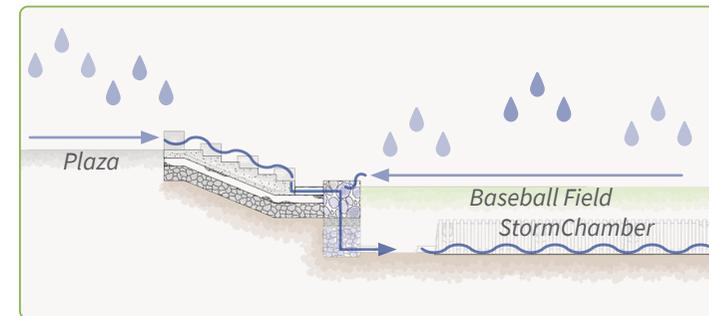


Figure 9.02 - Bleacher Storm Management System; Pranikoff, 2020

Playground

Savanna Park serves the entire Reedsburg community – including and especially the neighborhood children. At approximately 30,500ft², the new Savanna Park playground is spacious enough for more than fifty children to play at once. The space incorporates six different play zones to accommodate all age groups, interests, and abilities.

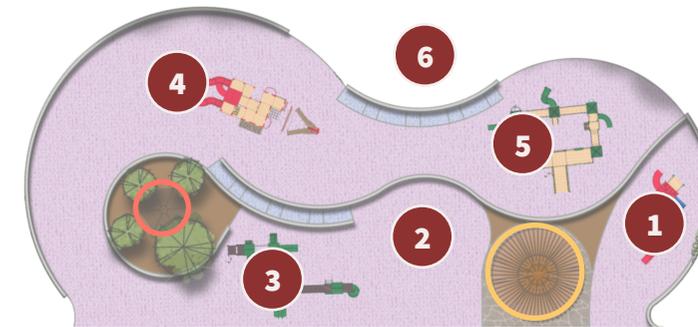


Figure 9.03 - Playground Zones; Pranikoff, 2020



Figure 9.04 - View from Childrens' Gazebo; Pranikoff, 2020

- **Childrens' Gazebo**
- **Parents' Gazebo**
- ① **Tot-lot Playground (pre-primary)**
This protected corner of the playground is physically separated from the big kids' play areas, providing a safe space for young ones to play within clear view of the parents' gazebo.
- ② **Ground / Wall Game Zone (primary-middle)**
No playground is complete without foursquare and wall-ball; this space features a high wall and flat ground to accommodate a variety of schoolyard games.
- ③ **Beginners' Play Zone (primary-middle)**
Medium-challenge play equipment and a clear view back to the parents' gazebo makes this space ideal for young children who are new to busy playgrounds.
- ④ **Purple Hill Zone (primary-middle)**
Unique rolling topography and a challenging climb define this transitional play zone. Children of all ages will enjoy running over the PIP-rubber moguls.
- ⑤ **Upper Play Landing (middle)**
With more challenging play equipment and larger spaces to run around, this area is geared towards the middle-school crowd.
- ⑥ **Forest Hill Zone (middle)**
Inspired by the unstructured play legacy of Carl Sørensen, this zone features felled trees, buried boulders, and plenty of dirt. Unstructured play encourages children to develop team-working skills and deeper social bonds with each other.

Savanna Park Field

Baseball Diamond

The Savanna Park baseball field features a plate-to-pocket distance of 350 feet, making it suitable for teams of all ages and the largest baseball diamond in Reedsburg.

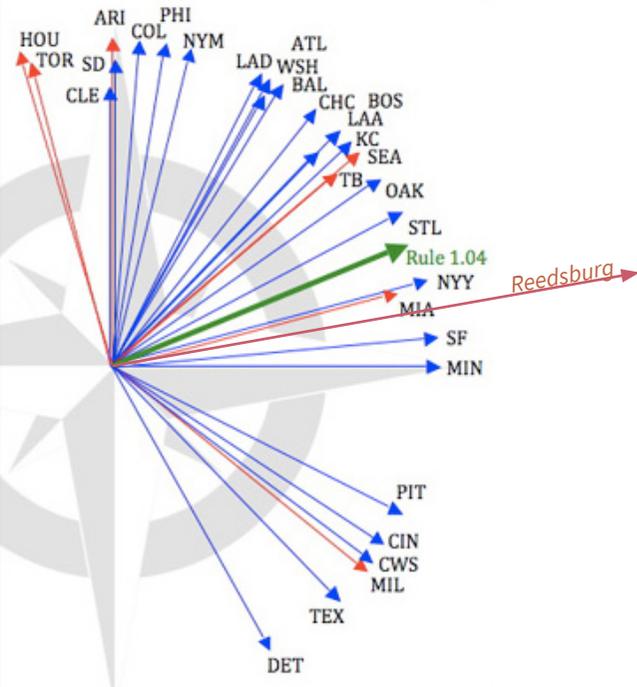


Figure 9.05 - Orientation of MLB Fields; Kagan, 2014 (adaptation Pranikoff, 2020)

Rule 1.04 of the MLB handbook states, in part, that “it is desirable that the line from home base through the pitcher’s plate to second base shall run East-Northeast.” This seemingly arbitrary requirement is designed to keep the sun out of batters’ eyes during a game (Kagan 2014). With an azimuth heading of 80°, the Savanna Park baseball field is only 12.5° south of ideal.

Ensuring equitable access to all park facilities is a must, and the baseball diamond is no exception. Each set of bleachers surrounds an ADA-compliant ramp to allow easy access from the plaza to the field level. These ramps also guarantee unimpeded access to the field in the case of an emergency or injury during a game.

Outfield Wall

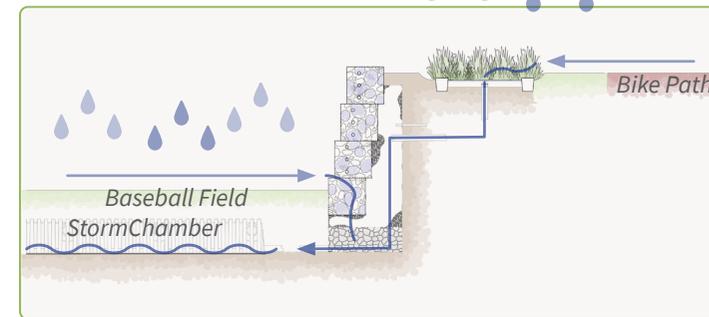


Figure 9.06 - Outfield Wall Storm Management System; Pranikoff, 2020 (not to scale)

The outfield gable wall features a scoreboard and integrated lights that twinkle to celebrate home team home runs. The gabion baskets are filled with a combination of angular stone and clear acrylic spheres to accentuate the lighting features.

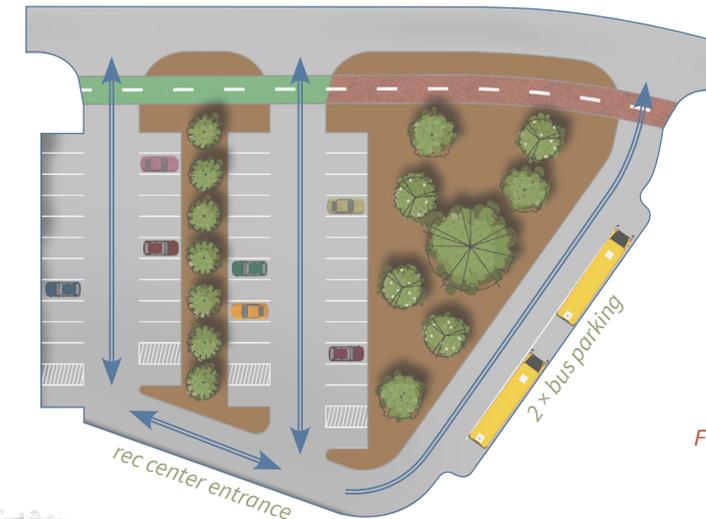
Much like the bleacher storm management system (Figure 9.06), the outfield incorporates best management practices to facilitate drainage on the field and address potential flooding impacts created by the new program. Water is captured by a series of French drains along the back of the outfield wall and directed to cisterns underneath the field, where it can be introduced back into the groundwater supply after a storm.

Parking

North Lot (recreation center)

This parking lot is designed to accommodate 41 regular car spaces and 16 handicap-accessible spaces with easy access to the recreation center entrance. Additionally, the parking lot has dedicated space for 2 buses to park without obstructing traffic or emergency access.

Two-way aisles allow for traffic to flow in from either entrance without worry, although restrictions can be put in place during especially high volume events.



South Lot (playground)

This smaller parking area accommodates 29 regular car spaces and 8 handicap-accessible spaces.

A one-way aisle provides flowing access back out to the main road without creating cross-traffic.

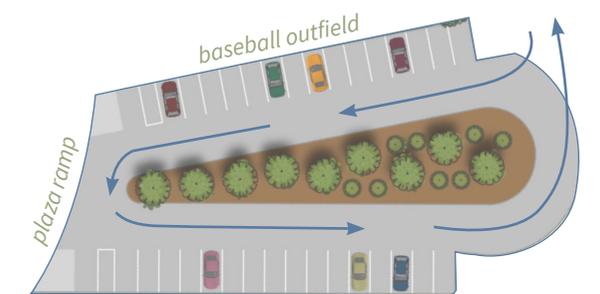


Figure 9.07 - Parking Lot Circulation Diagrams; Pranikoff, 2020 (not to scale)



Section Through Playground, Plaza, Ball Field, & Savanna Park Drive

Figure 9.08 - Section Through Playground, Plaza, Ball Field, & Savanna Park Drive; Pranicoff, 2020



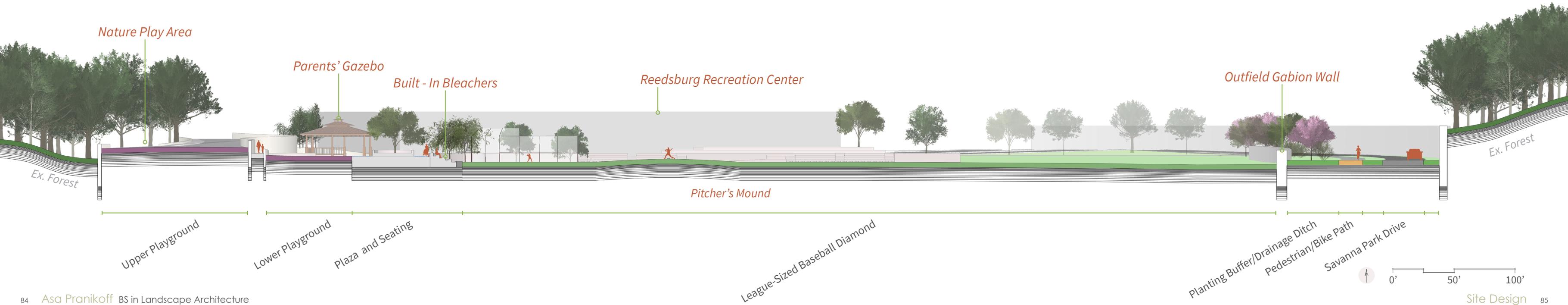
Figure 9.09 - View from Nature Play Area; Pranicoff, 2020



Figure 9.10 - View from Recreation Center; Pranicoff, 2020



Figure 9.11 - Bicycle Entrance to Savanna Park; Pranicoff, 2020



EARTHWORK & STORM MANAGEMENT

SITE STATISTICS & BEST MANAGEMENT PRACTICES

GRADING

Overview

Savanna Park spans approximately seventy-five feet of natural elevation change. The highest point of the site lies in the middle, in the form of a ridge bisecting the park. This severe topography poses a challenge in efficiently locating several flat sports fields and maintaining universal accessibility.

Rationale

Building into the Hill

Reconciling the flat ball field with the rolling topography presents three options: excess cut, excess fill, or a 50/50 balance between the two. In an ideal world, a balance is the perfect solution, but when the need for easy access from the existing road is considered, things become more complicated. For this reason, the decision to cut deeper into the hill makes the most sense.

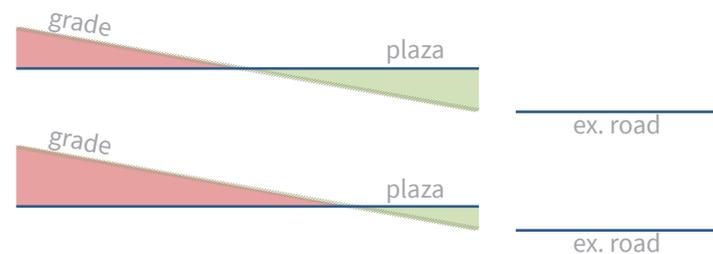


Figure 10.01 - Comparison of Grading Options; Pranikoff, 2020

Plaza, Recreation Center, & Road Elevations

The finished floor elevation (FFE) of the recreation center, by relation, defines the elevation for all of the other elements on the site. Set at 960.2' above sea level, the recreation center is approximately five feet above the street-level entrance to the park.

Savanna Park Drive climbs at approximately 2.5% from the park entrance to the north parking lot, reconciling with the grade in both places. The north parking lot slopes down to the plaza level also at approximately 2.5%, maintaining easy access for visitors of all abilities.

Ball Field Elevation

While baseball diamonds are not truly flat, the edges effectively create a plane. The infield edges of the Savanna Park ball field are set at approximately 955.0', the same as the entrance to the park. While this generates significantly more excavated soil, it eliminates the need for an unsightly wall blocking the view from the park entrance to the recreation center. Instead, a grand view is created as the bleachers rise above the field to meet the plaza level. Additionally, it prevents an "infinity edge" effect when looking out from the recreation center.

Filling in the Brush Pile

During a meeting with administrators from the City, it was mentioned that the proposed new location for the brush pile is prone to soggy soil, making it less-than-ideal for construction and dumping. To mitigate this, soil removed for the construction of the baseball diamond will be mixed with sand and crushed stone to create a well-drained structural soil base for the new brush pile.

total cut

64,000 cubic yards

total fill

7,500 cubic yards

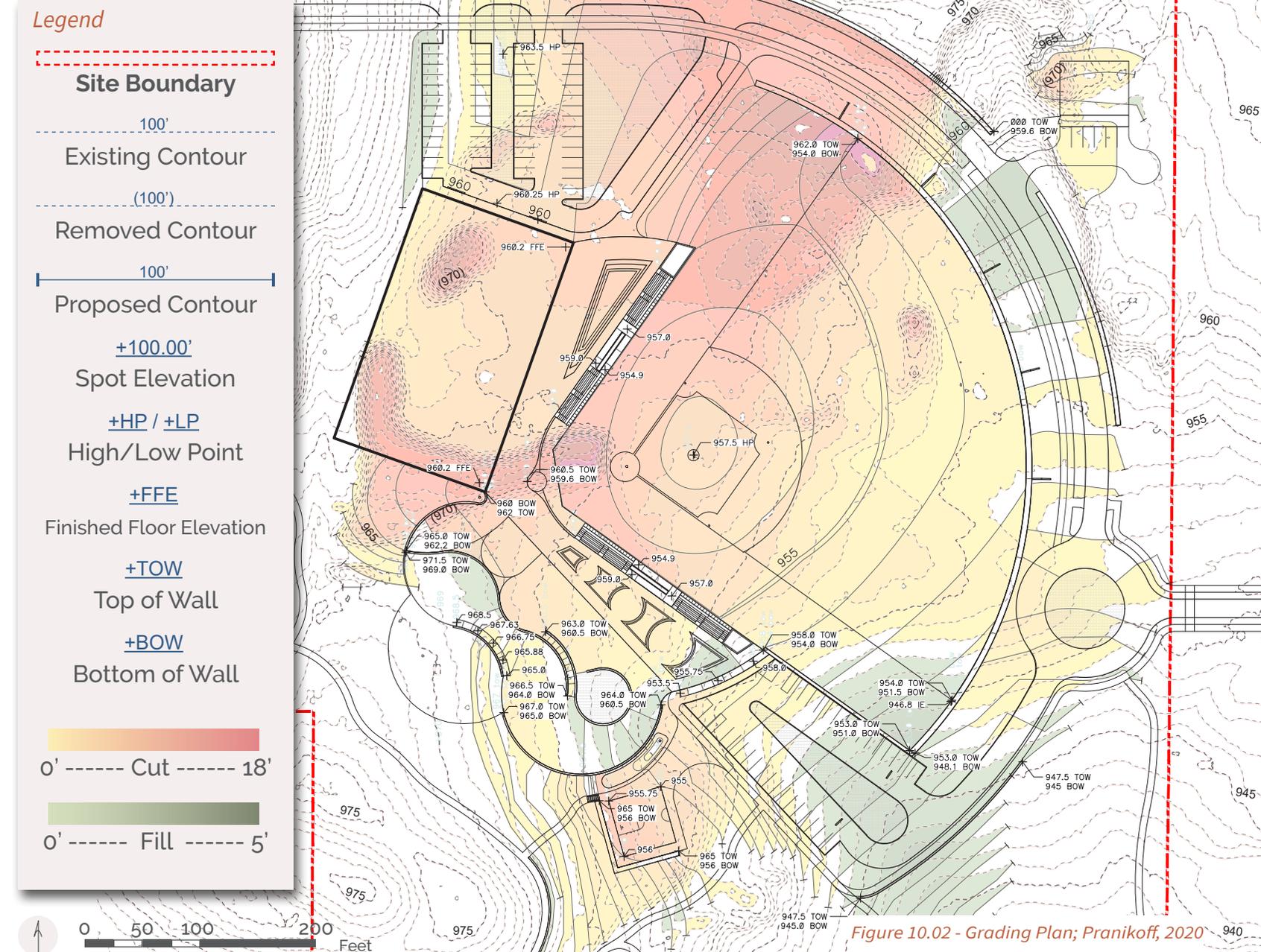


Figure 10.02 - Grading Plan; Pranikoff, 2020

DRAINAGE

Overview

Savanna Park lies near the top of the local watershed. As a result, the rest of the watershed will be impacted by decisions made in its development, making it all the more important to set a good storm management precedent.

As storm events become increasingly severe and freshwater resources become increasingly scarce, it is important to be forward-thinking in the development of best practices for storm management. With that in mind, Savanna Park is designed to capture 100% of the runoff produced by 24 hours of the 100-year storm event (at an I value of 6 in/hr).

Focus Areas

Parking Lots

Each parking lot on the site is equipped with a porous pavement which serves to prevent hazardous standing water and help to infiltrate water back into the ground. Additionally, strip drains at the downhill end of each parking lot capture any water that cannot infiltrate the pavement quickly enough.

Plaza & Bleachers

Elevated pavers allow water to quickly infiltrate the top layer of the plaza, preventing standing water from collecting. The entire plaza is constructed on a twelve-foot-deep level spreader to retain water and connect it to the bottom of the bleachers. Water is then channeled below the surface to the backs of the bleachers, where it can enter the storm management system.

The concrete bleachers are constructed over a crushed stone base, which allows water to flow freely from the plaza level to the cisterns below the baseball field, as seen in the diagram to the right.

Outfield & Entrance Drive

Savanna Park Drive is lined with five sets of drains, each with two catch basins and a stone check-dam to reduce sediment buildup in the system. The water from each of these drains daylight into the back of the outfield wall.

The outfield wall is constructed using gabion cells, which contain large angular crushed stone to allow the passage of water through the structure. This serves a dual purpose to alleviate hydrostatic pressure on the uphill side of the wall, as well as transporting water from drains along the road to the cisterns below the baseball field (see below).

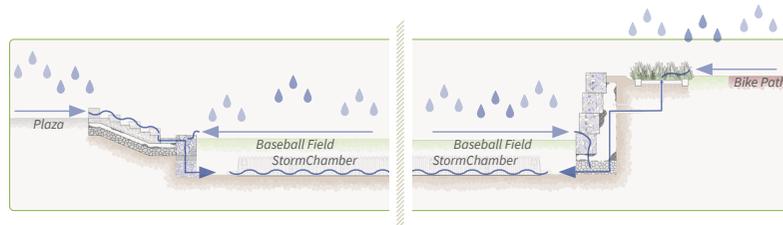


Figure 10.03 - Baseball Field Storm Management System; Pranicoff, 2020 (not to scale)

Baseball Field

Savanna Park's flagship storm management feature is the system of cisterns supporting the main baseball field. The sunken field provides the opportunity to transport water down from the rest of the site and stage it for reintroduction into the groundwater supply (see page 27 for specific precedent imagery).

Additionally, the outfield will be planted with an aggressively-rooting rhizomatous tall fescue (RTF) turf grass, which provides significantly greater water infiltration as compared to the traditional bluegrass or lawn planting (with C values of 0.3 and 0.5, respectively).

Legend

- Site Boundary
- Drain Shed
- 100'
- Existing Contour
- (100')
- 100'
- Proposed Contour
- +100.00'
- +HP / +LP
- +RE / +IE
- α8"
- ~ 100.00'
- Daylight Elevation
- ⊗ or ⊠ Drain

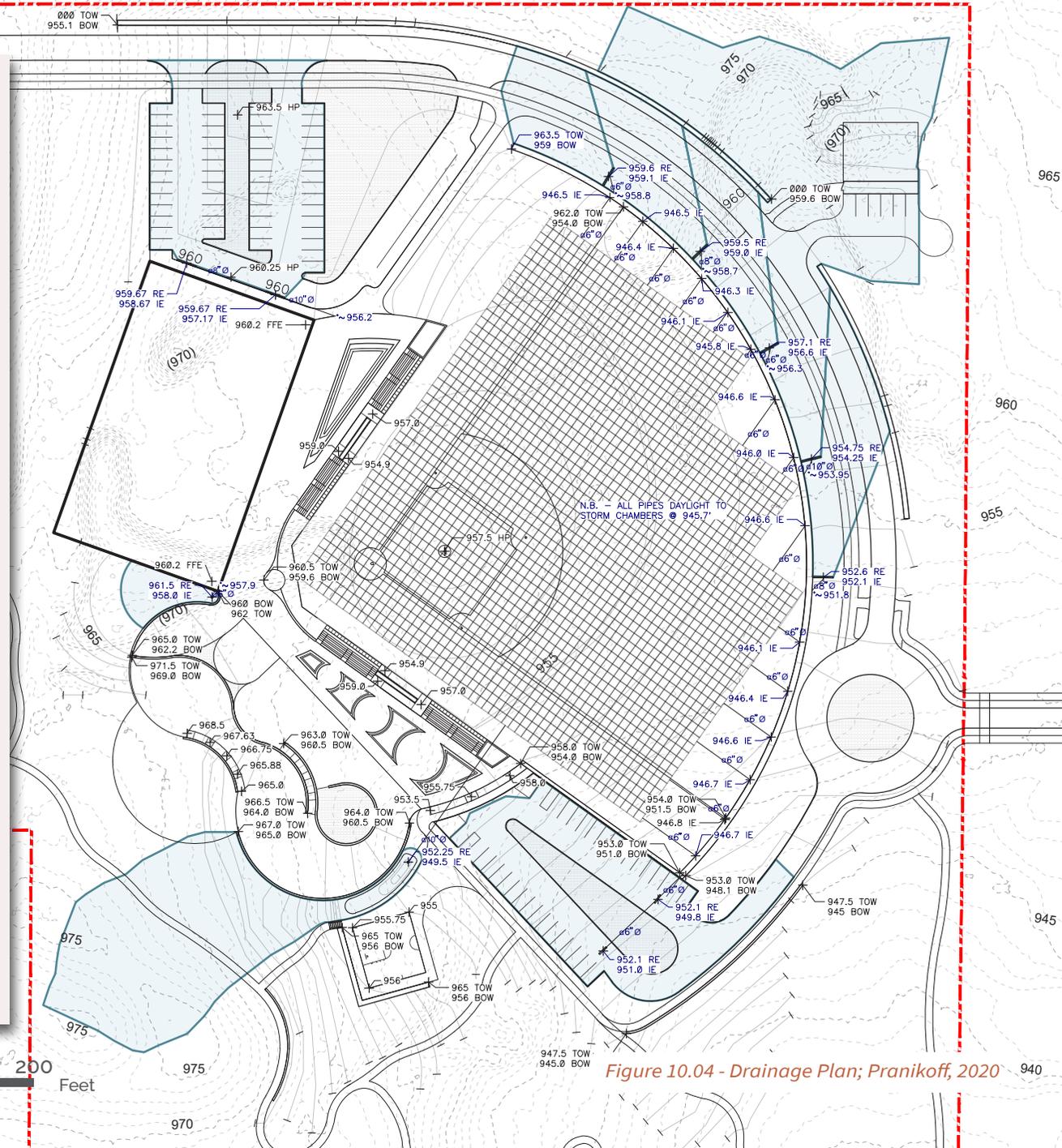


Figure 10.04 - Drainage Plan; Pranicoff, 2020

Methods

Scope

The storm management calculations listed below represent only the area inside the “focus area” scope of this project (approximately 21 acres).

“Q” Values

In order to evaluate the performance of the storm management system, it is necessary to calculate a quantitative value (Q) that is consistent between the existing and proposed conditions. “Q” represents the amount of water that runs off of the site in cubic feet per second. This value can be obtained through a simple formula:

$$Q = C \times I \times A$$

where “C” is the runoff coefficient of the specific surface, “I” is the rainfall intensity measured in inches per hour, and “A” is the area in acres. For the full list of runoff coefficients used, refer to Figure 10.05. Rainfall intensity varies depending on the region, and is consistently increasing as the climate changes; for the calculations in Savanna Park, the following values were used:

25 year storm: 4 in/hr 100 year storm: 6 in/hr
50 year storm: 5 in/hr 200 year storm: 8 in/hr

To ensure the sustainability of the design moving toward the future, measures for capturing and retaining storm water were designed to accommodate the 100-year storm event.

pre-Q **post-Q** **ΔQ**
38.19 cf/s **55.96** cf/s **17.77** cf/s

total runoff (post Q × 24 hours)

4,800,000 cubic feet

Water Retention and Staging

Calculating the total runoff is only one half of the stormwater battle: it is then necessary to capture, stage, and reintroduce that water back into the groundwater supply. Savanna Park employs two main types of stormwater retention devices: NDS StormChambers and crushed stone level spreaders. In the event of extreme rainfall, the sunken field will also flood to a depth of three feet before overflowing the surrounding wall, providing extra retention capacity.

The total capacity needed for staging is a function of the storm event intensity and duration. To uphold stewardship to the environment while remaining within a reasonable scope for the project, Savanna Park is designed to retain the difference in water runoff between the existing and proposed conditions, thereby negating any negative impact of the development.

new runoff (Δ Q × 24 hours)

1,500,000 cubic feet

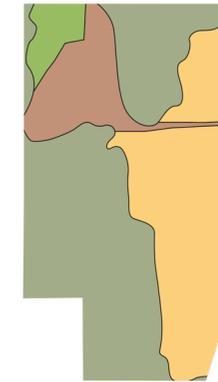
The total water holding capacity of the design is determined by adding the total pore-space of all of the site’s level spreaders, the internal volume of the StormChambers, and the volume of the submerged field:

Level Spreaders: 320,000 ft³
StormChambers: 900,000 ft³
+ Baseball Field: 285,000 ft³ (emergency only)

total storage

1,505,000 cubic feet

Measurements



Existing (pre-Q)

Land Cover Type	Coeff.	acres		cubic feet / second				25y Total Q
		Area		25y Ind Q	50y Ind Q	100y Ind Q	200y Ind Q	
● Forest (0-2% slope)	0.18	0.00		0.00	0.00	0.00	0.00	25.46
Forest (2-7% slope)	0.2	3.93		3.15	3.93	4.72	6.29	50y Total Q
Forest (>7% slope)	0.22	5.90		5.19	6.49	7.79	10.39	31.82
● Ag Field (0-2% slope)	0.35	3.75		5.26	6.57	7.88	10.51	100y Total Q
Ag Field (2-7% slope)	0.37	3.66		5.41	6.76	8.11	10.82	38.19
Ag Field (>7% slope)	0.45	0.00		0.00	0.00	0.00	0.00	200y Total Q
● ● Compacted Earth	0.5	3.23		6.45	8.07	9.68	12.91	50.92

Proposed (post-Q)

Land Cover Type	Coeff.	acres		cubic feet / second				25y Total Q
		Area		25y Ind Q	50y Ind Q	100y Ind Q	200y Ind Q	
● Forest (0-2% slope)	0.18	0.00		0.00	0.00	0.00	0.00	37.31
Forest (2-7% slope)	0.2	4.03		3.23	4.03	4.84	6.45	50y Total Q
Forest (>7% slope)	0.22	2.96		2.60	3.25	3.90	5.20	46.63
Ag Field (0-2% slope)	0.35	0.00		0.00	0.00	0.00	0.00	100y Total Q
Ag Field (2-7% slope)	0.37	0.00		0.00	0.00	0.00	0.00	55.96
Ag Field (>7% slope)	0.45	0.00		0.00	0.00	0.00	0.00	200y Total Q
● Compacted Earth	0.5	0.39		0.79	0.99	1.18	1.58	74.61
● Ball Field (enclosed)	0.2	2.33		1.86	2.33	2.79	3.72	
● Porous Pavement	0.35	2.28		3.20	3.99	4.79	6.39	
● Permeable Pavers	0.2	0.56		0.45	0.56	0.68	0.90	
● Prairie Mix	0.28	4.15		4.65	5.81	6.98	9.30	
● Planted Area	0.30	0.82		0.98	1.22	1.47	1.96	
● RTF Grass	0.30	1.85		2.22	2.77	3.33	4.44	
● Swale	0.2	0.10		0.08	0.10	0.12	0.15	
● Gabion Top	0.3	0.10		0.12	0.15	0.18	0.24	
● PIP Rubber	0.2	0.51		0.41	0.51	0.62	0.82	
● Green Roof	0.2	0.82		16.72	20.91	25.09	33.45	

Figure 10.05 - Stormwater Calculations; Pranikoff, 2020

IMPLEMENTATION

PHASING PLAN & CONSTRUCTION DETAILS



PHASING

Purpose

The City of Reedsburg administration indicated that they would like to phase this project to decrease initial cost, ease installation, and remain flexible as development progresses. Phasing can also help in the process of acquiring money from grants and stakeholders.

Demolition / Excavation

Before the preliminary phase, it is recommended to begin rough excavation and demolition, as the cut soil will be needed to complete Phase 1 of the installation.

Please refer to the Grading Plan on page 89 for grading details.

Installation Phases



1

~6.3 acres (preliminary)

Existing Program & New Access

- Relocation of existing brush pile before breaking ground
- Relocation of existing archery range
- Construction of new street and bike bath



2

~12.0 acres

Recreation Complex, Parking, & East Prairie

- New recreation center and baseball diamond
- New neighborhood playground
- New basketball court
- Development of prairie and trail connection to neighborhood

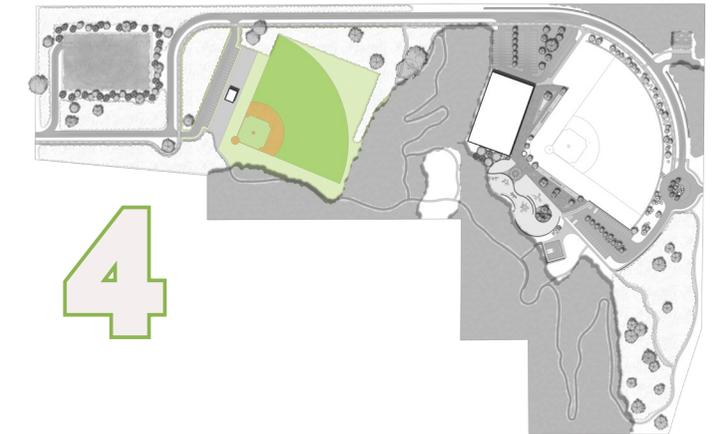


3

~13.2 acres

Forest Trails, Picnic Ground, & West Prairie

- Development of the remaining prairie
- Development of forest trail system and picnic area



4

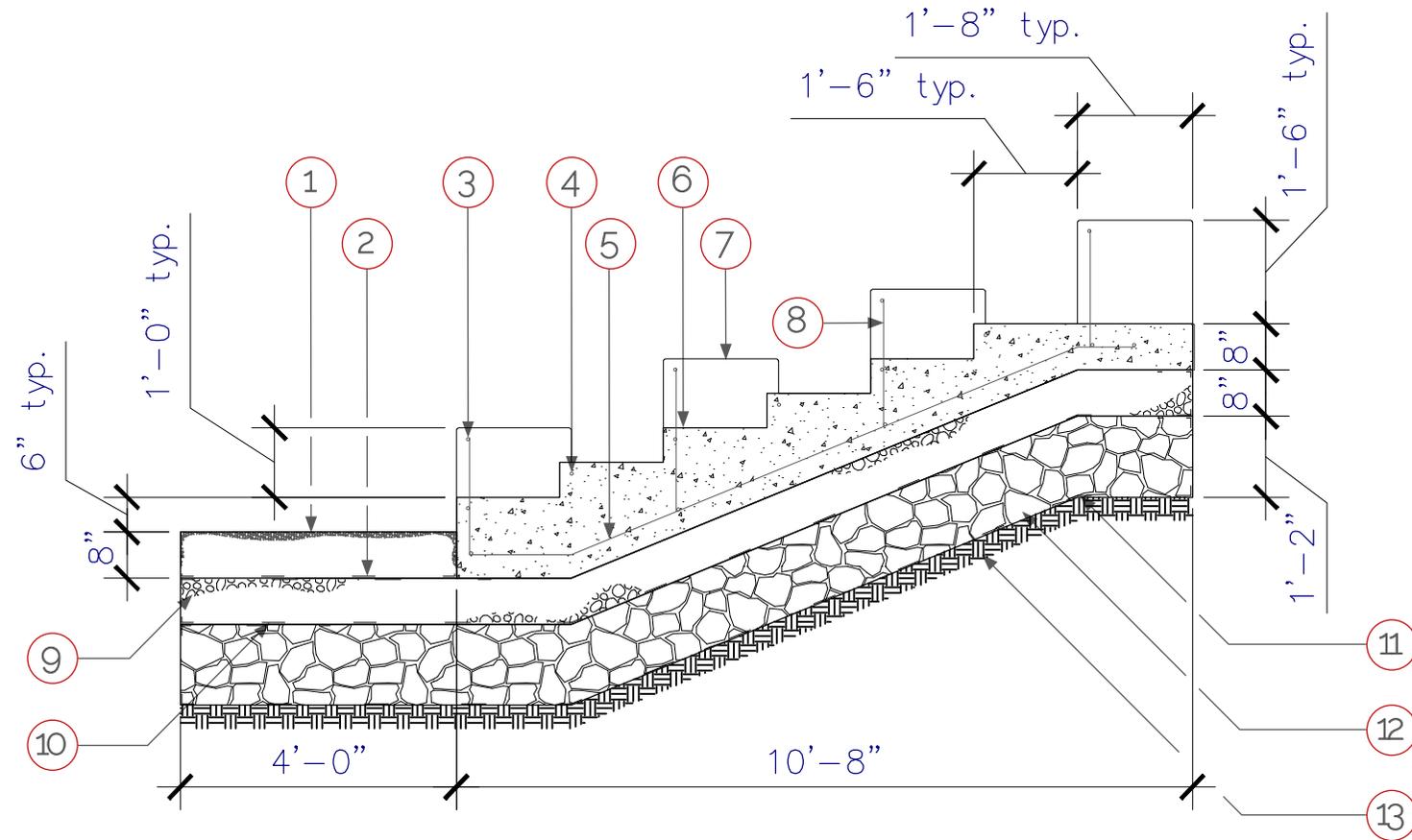
~4.5 acres (tentative)

Flexible Field & Parking

- Practice baseball diamond and soccer field
- The ultimate decision about the use of this space will come after further development of the neighborhood to best address their needs

Figure 11.01 - Savanna Park Phasing Diagram; Pranikoff, 2020

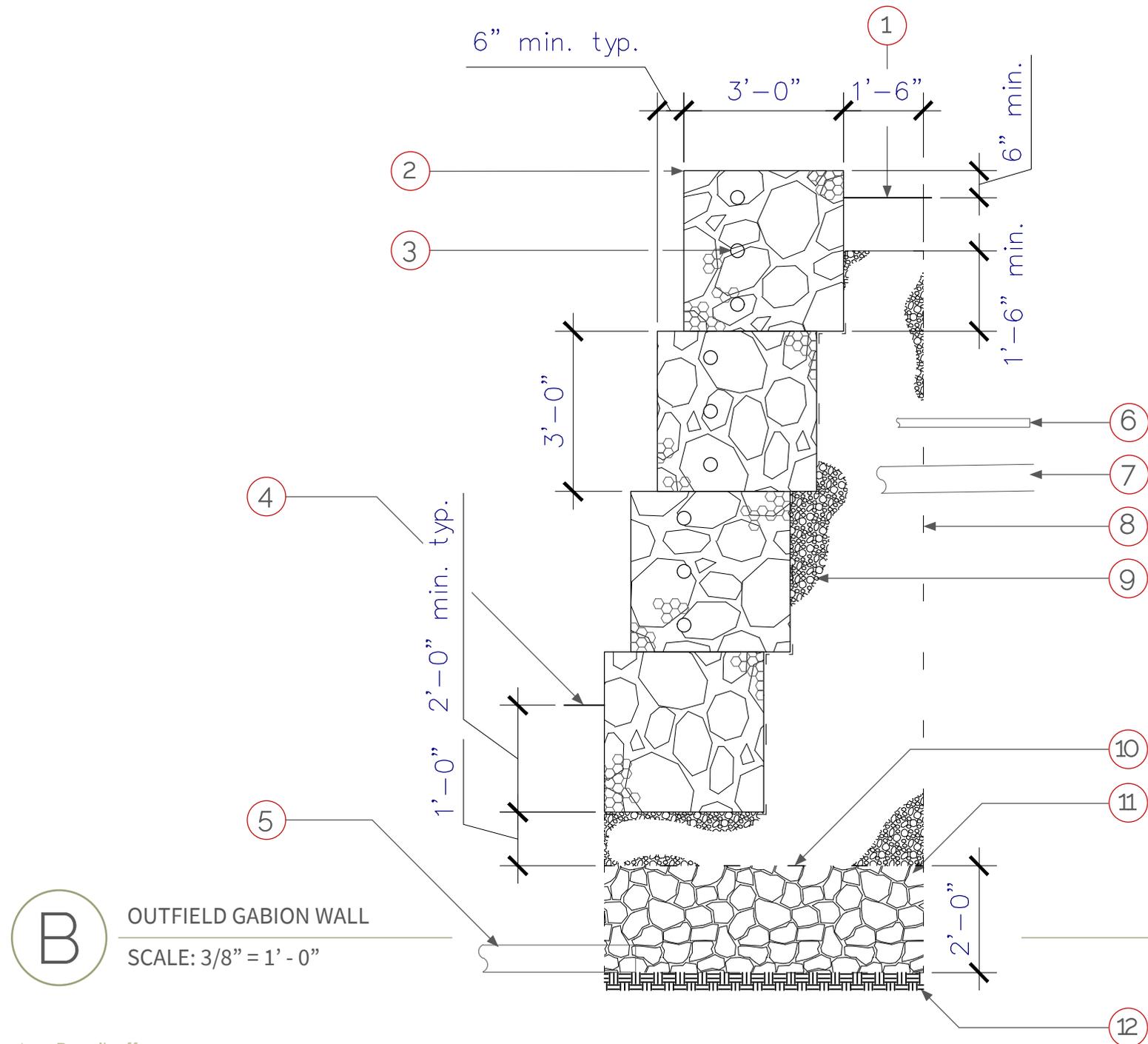
CONSTRUCTION DETAILS



A INTEGRATED BLEACHER
SCALE: 3/8" = 1' - 0"

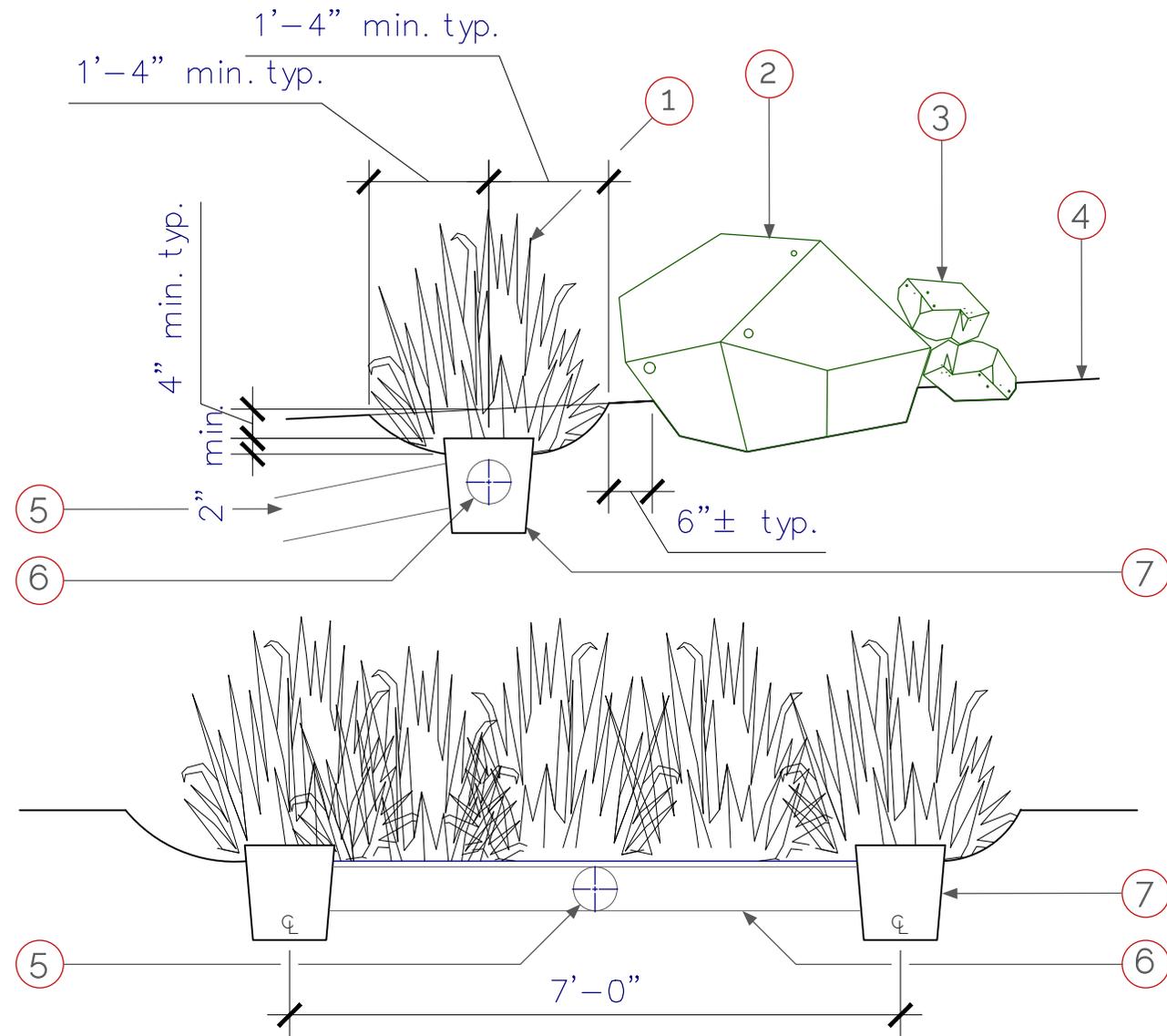
1. STABILIZED DECOMPOSED GRANITE PATHWAY MIX, MIDNIGHT BLUE. AVAILABLE FROM 'KAFKA GRANITE': 800-852-7415.
2. 'TYPAR' 3401 NON-WOVEN GEOTEXTILE; CONTINUOUS, MIN 1'-0" LAP JOINTS TYP.
3. NOSE ROD; #4 REBAR, ASTM A-615 GR 60, EPOXY COATED. DIP ALL CUT ENDS IN EPOXY. MIN 2" CLEARANCE ON ALL SIDES, CONTINUOUS.
4. NOSE ROD; SEE ABOVE.
5. #4 REBAR; SEE ABOVE FOR QUALITY AND FINISH. MIN 3" CLEARANCE ON ALL SIDES, CONTINUOUS, SPACE 1'-0" O.C.
6. CONCRETE; ASTM C-143, 2500 PSI MIN W/SHORT STRAND FIBERGLASS MIX PER MFG. INSTRUCTIONS, CONTINUOUS. HEAVY BROOM FINISH PERPENDICULAR TO TRAFFIC.
7. CONCRETE; ASTM C-143, 2500 PSI MIN W/SHORT STRAND FIBERGLASS MIX PER MFG. INSTRUCTIONS, CONTINUOUS. BUFF TO REMOVE FIBERGLASS STRANDS AND POLISH FINISH ALL SIDES.
8. #4 REBAR; SEE ABOVE FOR QUALITY AND FINISH. MIN 2" CLEARANCE ON ALL SIDES, CONTINUOUS.
9. CA-7 CLEAN CRUSHED STONE; COMPACT TO 95% IN 4" LIFTS, CONTINUOUS. NATURAL COLOR, SOURCE LOCALLY.
10. 'TYPAR' 3401 NON-WOVEN GEOTEXTILE; CONTINUOUS, MIN 1'-0" LAP JOINTS TYP.
11. 'TYPAR' 3601 NON-WOVEN GEOTEXTILE; CONTINUOUS, MIN 1'-0" LAP JOINTS TYP.
12. 6"Ø CLEAN ANGULAR STONE; COMPACT TO 85%, CONTINUOUS. NATURAL COLOR, SOURCE LOCALLY.
13. SUBGRADE; COMPACT TO 95% PROCTOR.

Figure 11.02 - Integrated Bleacher Construction Detail; Pranikoff, 2020



1. FINISHED GRADE (BIKE PATH).
2. 'MACCAFERRI' DOUBLE TWISTED MESH GABION; 3'x3'x6', W/PA6 POLYMER COATING, PAINT DARK BLUE TO MATCH REEDSBURG SCHOOL COLORS. FILL EVENLY WITH 2:1 MIX OF 8"Ø CLEAN CRUSHED STONE AND 8"Ø FROSTED ACRYLIC SPHERES. ACRYLIC SPHERES AVAILABLE FROM 'CDS': 909-930-5535.
3. EMBEDDED LIGHT; SPACE STACKS 3'-0" O.C., SEE LIGHTING PLAN FOR SPECIFICATIONS.
4. FINISHED GRADE (BALL FIELD).
5. SCH 40 PVC PIPE OUTLET TO STORMCHAMBER; SEE DRAINAGE PLAN FOR SIZING AND LOCATION.
6. CONDUIT; SEE ELECTRICAL DRAWINGS FOR DETAILS.
7. SCH 40 PVC PIPE INLET FROM ATRIUM DRAIN; SEE DRAINAGE PLAN FOR SIZING AND LOCATION.
8. 'TYPAR' 3401 NON-WOVEN GEOTEXTILE; CONTINUOUS, MIN 1'-0" LAP JOINTS TYP.
9. CA-7 CLEAN CRUSHED STONE; COMPACT TO 95% IN 4" LIFTS, CONTINUOUS. NATURAL COLOR, SOURCE LOCALLY.
10. 'TYPAR' 3601 NON-WOVEN GEOTEXTILE; CONTINUOUS, MIN 1'-0" LAP JOINTS TYP.
11. 8"Ø CLEAN ANGULAR STONE; COMPACT TO 85%, CONTINUOUS. NATURAL COLOR, SOURCE LOCALLY.
12. SUBGRADE; COMPACT TO 95% PROCTOR.

Figure 11.03 - Outfield Gabion Wall Construction Detail; Pranikoff, 2020



1. PRAIRIE CORDGRASS.
2. 2'-6" Ø ANGULAR BOULDER; BURY 1/3 BELOW GRADE.
3. 8" Ø ANGULAR BOULDER; BURY 1/3 BELOW GRADE.
4. FINISHED GRADE.
5. SCH 40 PVC PIPE OUTLET TO GABION WALL; SEE DRAINAGE PLAN FOR SIZING AND LOCATION.
6. SCH 40 PVC PIPE; SEE DRAINAGE PLAN FOR SIZING AND LOCATION.
7. 'NDS' 12"×12" CATCH BASIN (PART NO. 1200NGB); COVER WITH GALVANIZED STEEL GRATE ('NDS' PART NO. 1215), ONE SIDE OPEN, SEE DRAINAGE PLAN FOR PIPE DIMENSIONS. AVAILABLE FROM NDSPRO.COM.

C ATRIUM DRAIN W/ CATCH BASIN & STONE CHECK DAM
 SCALE: 1/2" = 1' - 0"

Figure 11.04 - Atrium Drain Construction Detail; Pranikoff, 2020

CONCLUSION

RESULTS, FUNDING, & REFLECTION

RESULTS & IMPACTS

Region

Social

Savanna Park serves not only the Reedsburg community, but the entire central Wisconsin area through organized baseball leagues. Reedsburg was already a hub for players across the region, and with improved facilities, everyone will benefit.

Ecological

By preserving even a small amount of the forest corridor and introducing new patches for pollinators in the area, Savanna Park will increase habitat availability and help to preserve species in the region. Additionally, by setting a precedent of environmental stewardship, Reedsburg can continue to be a shining example for other communities in the region.

Community

Economic

This proposed new development provides a variety of different economic gains for the community. By introducing new park and playground space in the neighborhood, this development will increase the value of properties in a neighborhood identified by Vierbicher Associates as an area of projected growth in their 2017 *Park Impact Fee Needs Assessment*.

Additionally, the new park will potentially draw patrons from outside the city, giving rise to an opportunity to capitalize on tourism.

Regarding future development, it is recommended that the city put measures in place to preserve the forest corridor that runs through to the north of the site. It is likely that the adjacent parcels will soon be purchased for residential development, and preserving as much of the forest corridor as possible is imperative.

Social

Close proximity to parks and high-quality recreation areas has been shown to have a variety of positive effects on both the physical and mental wellbeing of the community. In their 2014 report *Proximity to Urban Parks and Mental Health*, Sturm and Cohen found that those who lived within 400 meters of a public park scored the highest on mental health indexes, and that the number of park visits and total minutes of physical activity were “significantly and independently related to distance” (Strum & Cohen, 2014). A new park also provides a new location for community social events, which encourages further neighborhood interaction.

This development also addresses safety issues in the neighborhood by reducing hazardous traffic. This increases the safety for pedestrians, reduces heavy wear on neighborhood streets, and perhaps most importantly, gives parents peace of mind regarding the safety of children walking and biking to the park.

Ecological

Reedsburg is already home to several nature preservations, the closest being the Hay Creek Nature Area. By preserving additional forest and introducing new pollinator habitat, this project increases ecological value in the community.

Site

This project involves the development of currently disused agricultural land and remnant forest into a combination of natural and maintained spaces. This resultingly changes the ecology, hydrology, and character of the local landscape.

While any dramatic change will have an impact on the local ecosystem, overall, this project dramatically increases the diversity of both program and habitat available on the site, which benefits people and animals alike. For these reasons, this design is effective in accomplishing the goals set at the beginning of the project: increasing the economic, social, and ecological value of the land while maintaining stewardship to the environment.

FUNDING

Preliminary Cost Estimate (site work only)

Using value estimates established in Vierbicher’s *Park Impact Fee Needs Assessment* and areas calculated from the master plan, a preliminary cost estimate has been calculated for the project. It is important to note that this estimate does not include costs for the storm management system or new recreation facility and should therefore be thought of only as a baseline cost.

gross cost (rough estimate)

\$1,630,000

Activity	Cost/Acre	Acreage	Net Cost
Site Preparation per Acre	\$6,000	14.22	\$85,320
Landscaping per Acre	\$15,000	13.02	\$195,300
Shelters	\$25,000	0.95	\$23,750
Park Furniture (lights, benches, etc.)	\$30,000	14.22	\$426,600
Playground	\$35,000	6.19	\$216,650
Trails per Acre (\$12/l.f., 250' per acre	\$5,000	1.54	\$7,700
Parking per Acre \$7,500/stall, 4	\$35,000	1.5	\$52,500
Baseball Fields	\$125,000	4.99	\$623,750
Basketball Courts	\$10,000	0.5	\$5,000

Figure 12.01 - Site Work Rough Cost Calculation; Pranikoff, 2020

Grant Opportunities

State & National Grants

Knowles-Nelson Stewardship Program Grants

- Aids for the acquisition and development of local parks

This is a competitive grant available to local municipalities to aid with the acquisition of new lands for public park development and the development of new parks.

Recreational Trails Program (RTP)

- Aids for the development of new trails

This grant from the Wisconsin DNR reimburses up to 50% of the cost of development of eligible recreational trails. Pursuing this grant may be good incentive for connecting Savanna Park to the existing “400” State Trail far to the park’s south.

Private Grants

Baseball Tomorrow Fund

- \$10,000 grant awarded to a local organization in support of youth baseball

In conjunction with the MLB Field Maintenance Education Program, which provides coaches, parents and volunteers who maintain youth baseball and softball fields the opportunity to learn about field maintenance from MLB groundskeepers, this grant may be awarded to a local organization that supports youth baseball or softball.

CRITICAL REFLECTION

Content

All of the data, information, and content in this Capstone project has been collected, analyzed, and produced to the utmost of my capabilities at the time of completion. While I can look back with confidence in the work I have completed, it is important to understand that Capstone is a continuous and rapid learning process. With every completed task, new skills and strategies get developed and refined, and mistakes are realized.

Early in the process, I did struggle with the availability and accuracy of some data, such as zoning information, elevation information, and soil types on the site. While I was able to overcome some of these limitations by reaching out to other parties, some information, particularly GIS elevation data, is dubious in accuracy. Considering the importance of grading in this project, a detailed topographic survey would have been absolutely invaluable.

I also found that while there was abundant historical information on the City of Reedsburg, it was difficult to find rich information pertaining to the specific site. While overall I don't feel that this had a dramatic impact on the outcome, you never know when you might find an interesting gem of information that can go a long way in developing a connection to the place.

Process

If I had to identify one critical area where I believe vast improvements could be made, it would be community engagement. While I was fortunate to have multiple opportunities to meet with local administrative officials, I was not able to meet with residents of the neighborhood where the project is scheduled. There is a tremendous amount of valuable information that can be only be learned through conversation with the members of a community.

I struggled with needing to revisit portions of my research, planning, and scale decisions made early on in the process. Looking back, I did not have my sights set directly on the aspects of the research that would come into play in the design process. For instance, I dedicated a considerable amount of

time to researching playgrounds and play experiences, but perhaps that time would have been better spent by focusing on elements more integral to the design. That is not to say that play and playground design are not important, but that there were other elements that had a stronger driving force in the design process, such as grading and storm management.

In a similar vein, I feel that my energy was not evenly distributed among all the parts of the design process. I underestimated the complexity of the grading on the site, and as a result allowed it to draw a lot of my energy away from other aspects, such as fleshing out the design of the playground more significantly. While in an ideal world, I could have given as much energy to every aspect as I gave to grading and storm management, time is a limited resource. This was a good lesson in time budgeting, and an even greater lesson in how quickly grading becomes a very complicated matter.

This also would have been an excellent time to tap into the wealth of academic and human resources available in our department. While I did receive valuable insight from many members of both the class and the faculty, there were many points at which I was stuck and could surely have used the help of an additional brain. Capstone has been a learning experience in the importance of collaboration in a very different way than the rest of the classes in our curriculum.

Premise

While I believe that my proposed solution is the best that I could have produced during the Capstone process, I acknowledge that this project may extend beyond the realistic expectation of my client. My philosophy on this topic is that Capstone is meant to be a showcase of the skills and abilities we develop through our studies, and while the final product may be over-ambitious, it provides an excellent beginning point for a future implementation of the project.

I have felt throughout this process that the project would benefit from a wider scale. This could have been resolved in part through better communication with my client and instructors and in part by establishing a broader project from the beginning; for instance, an evaluation of the parks system in Reedsburg, with a focus on one park as the site plan. Overall, I do not feel that this limit in scale impeded my performance on delivering a successful Capstone project.

Personal

Every step of the Capstone process has been a tremendous learning experience for me, from establishing a relationship with my client in the first weeks of the project to navigating the complexities of working remotely during the COVID-19 pandemic.

At first, I approached this project with what I now feel is too much of an objective-oriented mindset. I built up my list of program elements, and began investigating how to make each one great by itself: a great playground next to a great baseball field, et cetera. As I conferred with my group and spoke with my clients about how my plans would address the needs of the City, I began thinking more broadly about how to compromise in some areas to make the project as a whole more functional. Shifting my view of the park from a network of connected elements to one unified system allowed me to develop a more efficient and functional plan.

Spending the latter half of the spring semester in virtual isolation taught me important lessons in the tremendous value of collaboration in the studio. While at times I have been frustrated with the hum-drum of the studio environment, I am more grateful now than ever for my peers and the faculty and staff of the Department of Planning and Landscape Architecture – without their continual input and encouragement this project and all of the projects before it would not be possible.

WRAP-UP

Overall, I feel that I have developed a successful Capstone project that meaningfully displays the skills and capabilities I have developed in my time with the DPLA. I believe that this is a valuable product for the City of Reedsburg, and I am excited to hear how they will incorporate it into the eventual development of the parcels that I have envisioned as Savanna Park.

This has been a considerable learning experience for me, and I am eager to take the lessons I have learned here into the professional world as begin my career as a Landscape Architect.

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Fall 2019 Time Log

	Date	Task Code	Hours
Week 2			
Monday	09/09/19	R	1.00
Thursday	09/12/19	R	3.00
Friday	09/13/19	R, E	3.00
Week 3			
Tuesday	09/17/19	W	2.00
Wednesday	09/18/19	R	2.00
Week 4			
Tuesday	09/24/19	R	2.00
Wednesday	09/25/19	R, W	5.00
Thursday	09/26/19	P	2.00
Friday	09/27/19	T, M, R	2.00
Week 5			
Monday	09/30/19	R, O	3.50
Tuesday	10/01/19	R, O, W	3.00
Thursday	10/03/19	A	3.00
Friday	10/04/19	O, W	2.00
Week 6			
Tuesday	10/08/19	W, O, R	2.50
Wednesday	10/09/19	W	1.00
Thursday	10/10/19	R, O	1.00
Saturday	10/12/19	A	2.50
Week 7			
Wednesday	10/16/19	A	3.00
Friday	10/18/19	R	2.00
Week 8			
Wednesday	10/23/19	W, E	2.00
Saturday	10/26/19	A	3.00
Sunday	10/27/19	A	3.00

	Date	Task Code	Hours
Week 9			
Tuesday	10/29/19	R	2.00
Wednesday	10/30/19	R	3.00
Sunday	11/03/19	W	3.00
Week 10			
Saturday	11/09/19	R	2.00
Sunday	11/10/19	D, W, A	3.00
Week 11			
Monday	11/11/19	D, W, A	4.00
Tuesday	11/12/19	D, W, A	2.00
Wednesday	11/13/19	W	1.00
Friday	11/15/19	R	2.00
Week 12			
Monday	11/18/19	D, P, O	3.00
Week 13			
Tuesday	11/26/19	P, O, W	4.00
Friday	11/29/19	P, O, W	3.00
Saturday	11/30/19	P, O, W	2.00
Week 14			
Monday	12/02/19	P, O, W	6.00
Tuesday	12/03/19	P, O, W	10.00
Saturday	12/07/19	T, A, O	8.00
Week 15			
Saturday	12/14/19	O, W	8.00
Sunday	12/15/19	O, W	12.00
Week 16			
Monday	12/16/19	O, W	12.00

149.5 Cumulative hours worked

Task Codes

Code: D (design), P (presentation/prep), M (meeting), T (travel), R (research), O (organizing), E (emailing), W (writing), A (analysis/inventory)

Spring 2020 Time Log

	Date	Task Code	Hours
Week 1			
Tuesday	01/21/20	O	4.00
Wednesday	01/22/20	O	1.00
Thursday	01/23/20	O, D	4.00
Friday	01/24/20	E	1.00
Week 2			
Tuesday	01/28/20	D, R	3.00
Wednesday	01/29/20	D, R	2.00
Thursday	01/30/20	D, R	5.00
Friday	01/31/20	D	2.00
Saturday	02/01/20	D	5.00
Sunday	02/02/20	D	3.00
Week 3			
Monday	02/03/20	M, T	2.00
Tuesday	02/04/20	O, D	3.00
Wednesday	02/05/20	D	6.00
Thursday	02/06/20	D	3.00
Friday	02/07/20	O, D	3.00
Saturday	02/08/20	D	2.00
Sunday	02/09/20	D	2.00
Week 4			
Monday	02/10/20	D	2.00
Tuesday	02/11/20	D, O	3.00
Thursday	02/13/20	R, O	3.00
Friday	02/14/20	D	3.00

	Date	Task Code	Hours
Week 5			
Tuesday	02/18/20	W	3.00
Wednesday	02/19/20	W	2.00
Thursday	02/20/20	D, W	6.00
Friday	02/21/20	D	3.00
Week 6			
Monday	02/24/20	D	2.00
Tuesday	02/25/20	D	6.00
Wednesday	02/26/20	D, O	4.00
Thursday	02/27/20	D, O	4.00
Friday	02/28/20	D, O	6.00
Saturday	02/29/20	D, O	14.00
Sunday	03/01/20	D, W	10.00
Week 7			
Monday	03/02/20	D, R	5.00
Tuesday	03/03/20	R	4.00
Wednesday	03/04/20	R	3.00
Thursday	03/05/20	O	2.00
Friday	03/06/20	D, W	6.00
Saturday	03/07/20	D	8.00
Sunday	03/08/20	D	11.00
Week 8			
Monday	03/09/20	D	13.00
Tuesday	03/10/20	D, W	13.00
Wednesday	03/11/20	D, O	16.00

Spring 2020 Time Log (continued)

	Date	Task Code	Hours
Week 9			
SPRING BREAK			
Week 10			
Monday	03/23/20	R	2.00
Tuesday	03/24/20	D	5.00
Wednesday	03/25/20	D	5.00
Thursday	03/26/20	D	6.00
Friday	03/27/20	D	3.00
Week 11			
Monday	03/30/20	D, W	6.00
Tuesday	03/31/20	D	6.00
Wednesday	04/01/20	D	5.00
Thursday	04/02/20	D	6.00
Friday	04/03/20	D	5.00
Saturday	04/04/20	D	2.00
Sunday	04/05/20	D	2.00
Week 12			
Monday	04/06/20	D	7.00
Tuesday	04/07/20	D	7.00
Wednesday	04/08/20	D	7.00
Thursday	04/09/20	D	7.00
Friday	04/10/20	D	7.00
Saturday	04/11/20	D	3.00

	Date	Task Code	Hours
Week 13			
Monday	04/13/20	D	4.00
Tuesday	04/14/20	D	4.00
Wednesday	04/15/20	D	8.00
Thursday	04/16/20	D	8.00
Friday	04/17/20	D, W	8.00
Saturday	04/18/20	D, W	6.00
Sunday	04/19/20	D, W	6.00
Week 14			
Monday	04/20/20	D	8.00
Tuesday	04/21/20	D	9.00
Wednesday	04/22/20	D	10.00
Thursday	04/23/20	D	6.00
Friday	04/24/20	D	1.00
Week 15			
Monday	04/27/20	D, W	5.00
Tuesday	04/28/20	D, W	7.00
Wednesday	04/29/20	D, W	8.00
Thursday	04/30/20	D, W	9.00
Friday	05/01/20	D, W	9.00
Saturday	05/02/20	D, W	10.00
Sunday	05/03/20	D, W	8.00
Week 16			
Monday	05/04/20	D, W	16.00
Tuesday	05/05/20	D, W	16.00
Wednesday	05/06/20	D, W	16.00

631.5 Cumulative hours worked

Task Codes

Code: D (design), P (presentation/prep), M (meeting), T (travel), R (research), O (organizing), E (emailing), W (writing), A (analysis/inventory)