



The Next 100 Years Lytle Park Master Plan

Mattoon, Illinois

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Prepared for:

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WRD

SUSTAINABLE RESULTS

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Executive Summary

The Lytle Park Master Plan is a living document that communicates a sustainable vision for the next 100 years, proceeding a century of existence that the park has supported Mattoon residents in many ways. By setting direction for current and future residents, development of the physical manifestations upon the site continues to support this sustainable vision and even builds off of them for generations to come. Shaped by feedback from Justin Grady, Lytle Park's Superintendent, and members of the Park Board, goals and objectives have been interpreted into this Master Plan document. Each green space has been developed to determine the arrangement of water elements, circulation patterns, structure locations, parking zones, and new landscapes. These arrangements are coupled with principles of design that center on sustainability, which inform the final layout and material choices for each garden space.

Building off existing uses within the park, the goals and objectives are to weave together art, nature, culture, and sustainability. Through the restoration of native ecosystems to managing on-site stormwater, the ideas engendered in each plan, sketch, and written description of places within Lytle Park collectively represent its commitment to being recognized as an educator of sustainability. From the utilization of on-site signage and demonstrations to the promotion of new programmatic opportunities and beyond, the park establishes itself as a leader in teaching visitors about environmental responsibility.

To financially support the implementation of these new ideas and gardens, the Master Plan identifies grant opportunities and their deadlines for submittal. By embracing sustainability at the level described in this booklet, avenues to funding can increase for Lytle Park.





ACCESS & CIRCULATION



NATURAL CLEANSING



ART WALK



NEW ACTIVE GREEN ENVIRONMENT



CHILDREN'S PLAYSCAPE



SUSTAINABLE OPERATIONS

Master Plan

Looking toward the next 100 years of recreation for Mattoon residents, the Lytle Park Master Plan takes the goals and objectives articulated by Justin Grady and the Park Board and turns them into action items that embrace sustainability. To better express how sustainable design plays a role in the new initiatives, the Master Plan is divided into five areas - Natural Cleansing, Art Walk, New Active Green Environment, Children's Playscape, and Sustainable Operations. A sixth component - Access & Circulation - links these spaces with new walkways, entry features, and safer pedestrian/vehicular points of encounter. Whether retrofitting an existing condition or implementing something new in the park, the new 100-year sustainable vision for Lytle Park is expressed through strategies that improve stormwater management, increase biodiversity, and connect people to nature.

For residents and visitors to the site, sustainability is introduced via multiple features and visible elements that inspire each person to take action toward improving the environment in and around Mattoon. For example, a series of native landscape beds weave throughout the site, enclosing spaces and defining edges. Concurrently, these beds function as part of a larger stormwater management system by reducing runoff, infiltrating water, and making that water available for flora and fauna above and below ground. Native vegetation also fosters biodiversity by offering a variety of food sources while providing wildlife habitat. Through interpretive signage, the sustainable features around the park educate visitors about 'green' strategies that they can implement at their home and/or business.

The Preliminary Opinion of Cost section is broken down by garden space and is the beginning of a strategy to realize the Master Plan vision. The organization and design of the overall site allows each space to be developed without a negative impact on the daily operations of Lytle Park.



Lytle Park

Site Plan



A Vision for
the Next 100 Years...



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Goals & Objectives

Preliminary interviews with Justin Grady were critical in generating an outline of visions and expectations for Lytle Park. Continued correspondence, including feedback from Park Board members, resulted in the creation of a list of fundamental project goals and objectives. This list provides a written foundation to guide future decision-making and design development.

GOAL – To unify the site

- Identify outdoor activity areas
- Link outdoor activity areas via pathways, bedlines, views, etc.
- Utilized common materials to maintain a comprehensive design theme
- Consider themed signage

GOAL – To enhance existing access points

- Identify key access locations for pedestrians and vehicles
- Establish an access hierarchy
- Utilize design features that establish park identity and create a sense of entry

GOAL – To promote and educate visitors about sustainability

- Utilize renewable energy resources such as solar and wind technologies
- Promote natural stormwater infiltration
- Utilize native plant palettes
- Consider constructed wetlands for septic waste management

GOAL – To promote effective parking opportunities

- Convert existing gravel parking zones to paved lots
- Utilize striping to define parking stalls
- Maximize total number of parking stalls
- Maintain parking for activities throughout site

GOAL – To address site flooding and drainage issues

- Minimize hardscape area or utilize porous pavement where possible
- Utilize infiltration systems such as runoff interceptors, rain gardens, and bioswales
- Harness runoff in rain barrels or cisterns

GOAL – To implement a new pavilion

- Size structure to meet park demands
- Locate in close proximity to parking for convenience
- Avoid conflict with regional amphitheater
- Provide necessary infrastructure (electricity, water, etc.)

GOAL – To maintain and enhance the functionality of existing site activities

- Maintain parking and access for tennis courts
- Maintain parking and access for pool
- Maintain access to operations zone
- Enable minimum 15' height clearance for semi-truck accessibility

GOAL – To enhance and control site circulation patterns

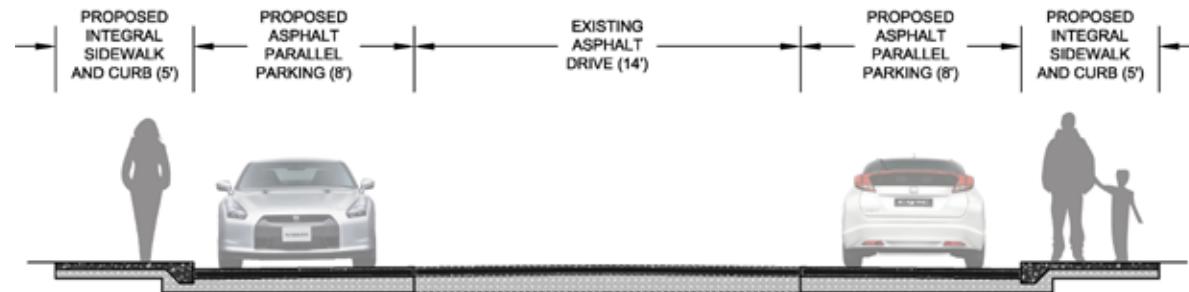
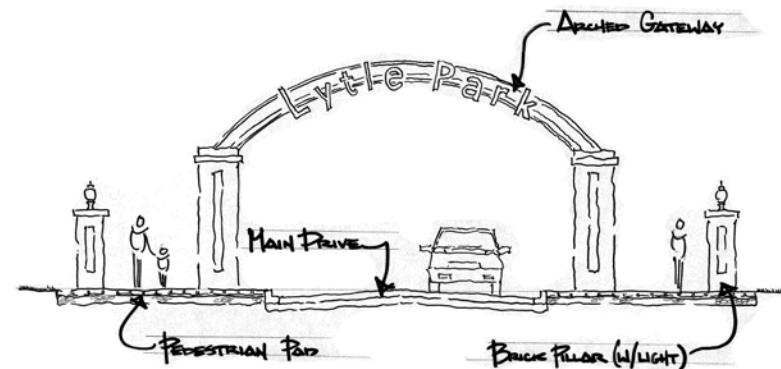
- Designate one-way traffic flow through site (e.g. signage or pavement arrows)
- Reconfigure convergence of entry drives to promote one-way traffic flow
- Utilize traffic calming devices such as narrower drives and speed humps
- Eliminate sidewalk dead-ends

Access & Circulation

Currently, access to Lytle Park is predominately vehicular-based; while in the park, vehicles parked along the road often create conflicts with pedestrians. To alleviate these conflicts and make the park more user friendly toward pedestrians, a series of walking paths, enhanced entry nodes, and dedicated parking areas are introduced. Organizing site gateways under two categories - main access points for vehicles and smaller access points for pedestrians - the Master Plan highlights all entries with stone columns that reflect the existing columns. Serving as visual cues for access, these features increase safe routes into the park from the surrounding residential neighborhood.

Vehicular drives are narrowed to reduce pavement surface; this also alleviates urban heat island effect and helps calm/slow traffic. A redesigned interior intersection reduces asphalt and funnels cars into a single exit drive while keeping a safe turning radius. A new paved parking lot replaces the existing gravel lot, improving long term maintenance and traffic patterns.

The design also introduces new pedestrian paths throughout the site, notably along the drives. Another path meanders from the northwest corner of the park, linking the Children's Playscape, New Active Green Environment, and new parking lot. The pathway continues south, providing access to the new pavilion and Great Lawn, and connects to the new Art Walk loop. Continuing further south, visitors gain access to a turf trail that meanders through a proposed savanna ecosystem.



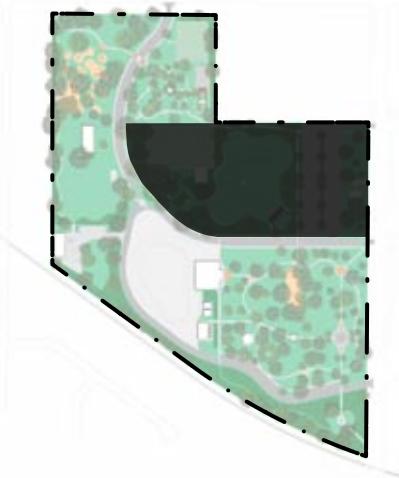


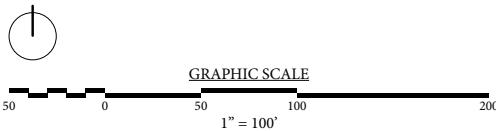
Natural Cleansing

The Natural Cleansing area is centered primarily around sustainable stormwater management. Acting as a 'sponge' the green space will intercept runoff from the lawn and parking lot to alleviate current on-site flooding issues. Water flowing westward from the parking lot will be directed through a series of bioswales, native beds, and rain interceptors to naturally infiltrate water into the ground.

A new free-standing restroom will utilize plants and microbes to cleanse effluent from the restroom; existing lines from the bath house will also be rerouted to the wetland so that on-site effluent is cleansed through the constructed wetland. Mimicking nature, a constructed wetland is an enclosed cell that is similar to a septic field; the main difference is the inclusion of plants to increase the cleansing properties. Created for anthropogenic discharge such as wastewater, stormwater runoff or sewage treatment, constructed wetlands act as bio filters, removing sediments and pollutants such as heavy metals from the water.

From a recreational standpoint, this area contains a new pavilion to house events and a Great Lawn for informal gatherings, unprogrammed play, and seating for an outdoor summer film series. The pavilion will showcase sustainable techniques such as solar panels, recycled materials, and water harvesting. The design also supports features meant to engage visitors with the cleansing systems, including a constructed wetland viewing deck and rain garden boardwalk.





Art Walk

The Art Walk is a place where local artists and traveling art pieces are showcased around a walking loop located in the southeastern quadrant of the park. Sculptures along these pathways are placed at key nodes or evenly spaced intervals and range in scale and style. They include natural art, abstract forms, and interactive pieces where select photos within this Master Plan offer creative ideas for future artistic consideration.

Additional features introduced in this area of the park enhance existing elements. A gathering area in the center of the Art Walk has been expanded to include an ornamental garden. A second paved area has been added to the fountain to balance its design symmetry. Two paved gathering areas have been included adjacent to the internal playground so that parents have a place to sit and talk while keeping an eye on their children. In front of the pool facility, a terrace has been added so that visitors can orient themselves to the park and Art Walk. Lastly, rain gardens have been introduced at downspouts to capture and cleanse runoff from pool building rooftops.





Art Walk (cont.)



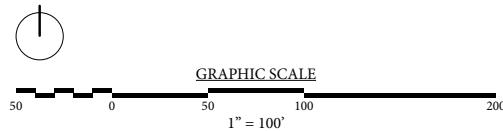


New Active Green Environment

New Active Green Environments (New AGE) embrace a design program for developing therapeutic recreational facilities in conjunction with attractive greenscapes. While community parks often target teenagers and young adults, New AGE is specifically focused on improving the health and quality of life of older adults. Its goal is to create physical activity opportunities that are friendly, attractive, and effectively get seniors involved in strengthening, stretching, and flexing, along with cardiovascular conditioning.

The New AGE garden is placed near parallel parking to aid senior accessibility and is available via a meandering central path. A circular pergola accentuates a central gathering area while a perimeter walking loop supports various New AGE stations. A shaded seating area is created to the east overlooking the existing pickleball court and a new community garden area with raised planting beds. Additionally, a native buffer and rain garden has been introduced to the north and east to improve stormwater runoff infiltration.





Children's Playscape

The Children's Playscape area is enhanced by equipment and items that connect children to the environment. The playground on the northern portion of this area has been expanded to include new nature-based equipment (see imagery) and a seating area for parents. The southern portion of this area remains open to promote unprogrammed play. To better serve pedestrian circulation, a new walkway meanders from the northwest corner where a new entry gate is envisioned. The existing pavilion, a central feature of this area, educates users about sustainable stormwater management through rain gardens at downspouts.

The Children's Playscape is also augmented by a native planting bed to the west and south. This feature serves multiple purposes - 1) it presents a singular design element that unifies the space; 2) it creates an edge that defines a spatial boundary; and 3) it establishes a natural buffer that simultaneously absorbs site runoff and provides native habitat for wildlife.





GRAPHIC SCALE
50 0 50 100 200
1" = 100'



Sustainable Operations

Sustainable Operations is the heart of maintenance and operations for Lytle Park. It is also a place where sustainable strategies such as geothermal wells, rainwater harvesting and recycling, solar panels, electric vehicle recharging stations, and resource recycling occur. Besides being a place just for park maintenance, this area also showcases opportunities that harness renewable resources and reduce energy dependency on non-renewable sources.





Preliminary Opinion of Cost

The following estimates are a preliminary look at costs for items in the Master Plan; the costs are based on 2012 construction dollars. The estimates are as inclusive as possible but should be seen as flexible, they will most likely fluctuate based on available materials, yearly escalation, local labor charges, and any grants and/or charitable contributions awarded to Lytle Park. Once a project has been identified, it is recommended that the design team engage contractors and vendors in and around Mattoon to discuss construction, materials, and how local talent can be utilized. This may also be an opportunity to educate contractors about sustainable techniques envisioned for Lytle Park.

* These items have been identified as candidates for grant applications. In many cases, local, state, and federal funds are available to help implement projects that embrace sustainable practices. Often times, grants can cover 75% to 100% of the material and installation cost.

| Access & Circulation | | |
|---|---------------------|---|
| Realign portions of existing road, incorporate sidewalk/curb edge, improve on-street parking stalls | \$ 500,000 | * |
| Retrofit landscape disturbed by construction | \$ 5,000 | |
| Reconstruct main entry piers, construct new pedestrian piers and entry gate/feature | \$ 100,000 | |
| Signage | \$ 10,000 | * |
| Misc demolition | \$ 10,000 | |
| subtotal | \$ 625,000 | |
| Natural Cleansing | | |
| Remove existing gravel parking lot, rebuild new asphalt lot with bioswale, curbs, and sidewalks | \$ 500,000 | * |
| Remove existing pole lights, reinstall new lighting and updated electric circuits | \$ 150,000 | * |
| Custom picnic shelter with outdoor seating area, lighting, water source, and solar panels | \$ 200,000 | * |
| Native landscape beds with water intercepts, regrading of Great Lawn, misc landscape repairs | \$ 20,000 | * |
| Rain gardens | \$ 15,000 | * |
| New restroom with constructed wetland | \$ 90,000 | * |
| Reroute bathroom effluent from bath house to constructed wetland | \$ 15,000 | * |
| Signage | \$ 10,000 | * |
| Movie screen, electricity reroute, projector pad | \$ 5,000 | |
| Misc demo, remove playground equipment | \$ 10,000 | |
| subtotal | \$ 1,015,000 | |
| Art Walk | | |
| Sidewalks, water feature plaza reconfiguration, gathering places | \$ 75,000 | |
| Terrace at the pool house, seating wall, lighting | \$ 20,000 | |
| Labyrinth | \$ 5,000 | |
| Native landscape beds | \$ 10,000 | * |
| Misc grading and demolition | \$ 10,000 | |
| Signage | \$ 10,000 | * |
| Sculptures | \$ TBD | |
| subtotal | \$ 130,000 | |
| New Active Green Environment | | |
| New walkways, stations, equipment, hardware | \$ 200,000 | * |
| Arbor, benches, misc site furniture | \$ 20,000 | |
| Signage | \$ 15,000 | * |
| Raised beds, walking surface material, water source | \$ 50,000 | |
| Landscape beds, landscape repair | \$ 10,000 | |
| Lighting | \$ 20,000 | * |
| Misc demo | \$ 10,000 | |
| subtotal | \$ 325,000 | |
| Children's Playscape | | |
| New sidewalks, seating areas, pedestrian entry gate/feature | \$ 20,000 | |
| Updated playground equipment, natural playscapes | \$ 500,000 | * |
| Native landscapes | \$ 5,000 | * |
| Signage | \$ 10,000 | |
| Remove/relocate existing equipment and amenities | \$ 10,000 | |
| Misc demolition | \$ 10,000 | |
| subtotal | \$ 555,000 | |
| Sustainable Operations | | |
| New maintenance building, upgraded utilities | \$ 80,000 | * |
| Water harvesting system | \$ 35,000 | * |
| Solar arrays | \$ 20,000 | * |
| Geothermal system | \$ 30,000 | * |
| Rain gardens | \$ 5,000 | |
| Fence and gates | \$ 25,000 | |
| Native landscape beds | \$ 5,000 | |
| Electric vehicle and charging station | \$ 50,000 | * |
| Lighting | \$ 20,000 | * |
| Misc demolition | \$ 10,000 | |
| subtotal | \$ 280,000 | |
| SUBTOTAL: | \$ 2,930,000 | |
| CONTINGENCY (25%): | \$ 732,500 | |
| TOTAL: | \$ 3,662,500 | |



Grant Opportunities

Grants can provide crucial funds for a variety of project types. Some provide startup funds, while others provide funds to continue existing projects. Often grant makers strive to support projects meant to help society in some way, like nonprofits that work to keep communities safer and healthier. The following includes a listing of preliminary resources to consider for potential funding resources.

Illinois Environmental Protection Agency Section 319 Grant

Grants are available to local units of government and other organizations to protect water quality in Illinois. Projects must address water quality issues relating directly to nonpoint source pollution. Funds can be used for the implementation of watershed management plans including the development of information/ education programs and for the installation of best management practices.

Application Due Date: August 1 of each calendar year.

Illinois Green Infrastructure Grant (IGIG)

Grants are available to local units of government and other organizations to implement green infrastructure best management practices to control stormwater runoff for water quality protection in Illinois. Projects must be located within a Municipal Separate Storm Sewer System (MS4) or Combined Sewer Overflow (CSO) area. Funds are limited to the implementation of projects to install best management practices (BMPs).

Application Due Date: December 15 of each calendar year.

Dr. Scholl Foundation

The Dr. Scholl Foundation is dedicated to providing financial assistance to organizations committed to improving our world. Solutions to the problems of today's world still lie in the values of innovation, practicality, hard work and compassion. Grants are made annually after an extensive review of the application by the staff and all the directors of the Dr. Scholl Foundation.

Application Due Date: submitted between November 1 and March 1 of the following year.

Illinois Department Of Natural Resources' Park And Recreational Facility Construction (Parc) Grant Program

The Park and Recreational Facility Construction Act (PARC) was created by Public Act 096-0820 effective November 18, 2009 to provide grants to be disbursed by the DNR to eligible local governments for park and recreation unit construction projects. Park or recreation unit construction project means the acquisition, development, construction, reconstruction, rehabilitation, improvements, architectural planning, and installation of capital facilities consisting, but not limited to, buildings, structures, and land for park and recreation purposes and open spaces and natural areas.

Application Due Date: Opening date for requests and deadline for applications are October 15 to November 29.

Illinois Department Of Natural Resources' Open Space Lands Acquisition and Development Program (OSLAD)

The Open Space Lands Acquisition and Development (OSLAD) Program is a state-financed grant program that provides funding assistance to local government agencies for acquisition and/or development of land for public parks and open space. The federal Land & Water Conservation Fund program (known as both LWCF and LAWCON) is a similar program with similar objectives. Both are managed in Illinois by the Department of Natural Resources with concurrent application due dates, equal grant maximums and similar general rules.

Application Due Date: between May 1 and July 1 of each calendar year.

Grant Opportunities - cont.

Illinois Clean Energy Community Foundation

In order to help certain facilities implement energy efficiency and renewable energy projects, the Illinois Clean Energy grant was started in 1999 with an endowment of \$225 million provided by ComEd. This program is open to all not-for-profit and municipal facilities for indoor lighting improvements. This grant may be used in conjunction with the DCEO and ComEd Smart Ideas for Your Business Programs - sometimes funding 100% of the total project cost! There are numerous grant types and deadlines, some of which are listed below. For a full list, visit <http://www.illinoiscleanenergy.org/how-to-apply/> for additional information.

Application Due Dates:

- Innovative Lighting Systems - January 15; July 16***
- Photovoltaic Systems - January 15; July 16***
- Solar Thermal Systems - March 14; Sept. 12***
- Emerging Technologies - January 15; July 16***

The Lumpkin Family Foundation

The Lumpkin Family Fund makes grants to organizations working in East Central Illinois toward long term improvements in the following mission areas: Environmental Health; Preventative (human) Health; Education and Community Access to the Arts; and, Civic Engagement and Community/Nonprofit Organizational Leadership.

Application Due Dates:

- Spring 2013 Cycle - Letters of Inquiry due February 22 (not before January 14); Applications invited by March 11; Applications due April 12; Grant decisions made by May 6.***

- Fall 2013 Cycle - Letters of Inquiry due August 30 (not before August 5); Applications invited by September 16; Applications due October 11; Grant decisions made by November 4.***

The Grand Victoria Foundation

The Grand Victoria Foundation funds three distinct programs: Core Grants support Illinois-based nonprofit organizations working to find systemic solutions; Elgin Grantworks provides general operating support to Elgin-based organizations; and Vital Land's Illinois funds land acquisition for conservation of critical parcels in Illinois. The foundation invests resources to build strong communities by strengthening education, protecting the natural environment, and promoting economic vitality.

Application Due Date: Core Grants - May 3. Vital Land's Illinois – open at any time.

The Kresge Foundation

The Kresge Foundation is a \$3.1 billion private, national foundation headquartered in Metropolitan Detroit, in the suburb community of Troy. The goals and aspirations of seven narrowly defined programs - Arts and Culture, Community Development, Detroit, Education, Environment, Health, and Human Services guide its grantmaking and investing.

Application Due Date: Arts and Culture - March. Environment – open at any time.

Community Foundation of Central Illinois

The Community Foundation of Central Illinois supports positive initiatives and innovative approaches to addressing the changing needs of our region. Their purpose is to strengthen community through engaged grant making and strategic partnerships with other organizations. Giving is focused on arts and culture, education, health and human services and community development.

Application Due Date: Community Arts Grant - March 1. Jean M. Ligon Animal Welfare Grant - March 1. Community Needs Grant - September 1.

Appendices

Context & Background

The history of Mattoon is tied to that of local railroads. In 1853, railroad surveyors from the Illinois Central Railroad and Terre Haute and Alton Railroad found their railroads would cross in the Mattoon area, so a burst of investment and land speculation began. In 1861, the town was officially named after William B. Mattoon, the chief construction engineer working for the Terre Haute and Alton Railroad. With its combination of excellent transportation and remarkably fertile prairie soils, Mattoon expanded rapidly.

A number of decades later, Mattoon district records show that Coles County Judge John Harrah appointed Howard S. Lytle, W.R. Johnson and Dr. J.G. Baker as the first park commissioners on Aug. 9, 1912, after receiving a petition calling for the formation of a park district. Four days later, the district officially formed when the commissioners were sworn into office. The records also show that the commissioners hired contractor H.B. Trout in 1913 to build concrete and steel band stands at Seventh Ward and Central parks, as well as the planned West Park on 32nd Street that would eventually become Lytle. Commissioner Lytle raised money to purchase the 32nd Street property in 1914 for the district.

Today, the Mattoon Township Park District is celebrating its centennial - 100 years of history during which the district has become most closely associated with running Lytle Park and its pool. However, Lytle was not the first park that the district managed after forming on Aug. 13, 1912; six days later, the Mattoon City Council granted the district jurisdiction and control over Seventh Ward Park and Central Park and since then the Mattoon Township Park District has been taking care of the community's recreation needs. The district opened Lytle Park in 1914.





Site Inventory / Analysis

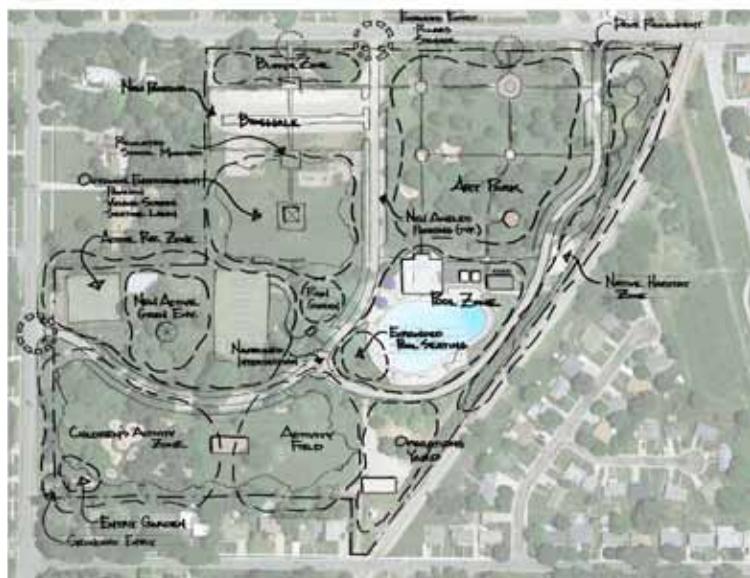
A thorough understanding of the environmental and cultural features of Lytle Park set the foundation for this Master Plan. Based on observations, research, dialogue, and time spent at Lytle Park with Justin Grady, the maps and diagrams shown here summarize that information.

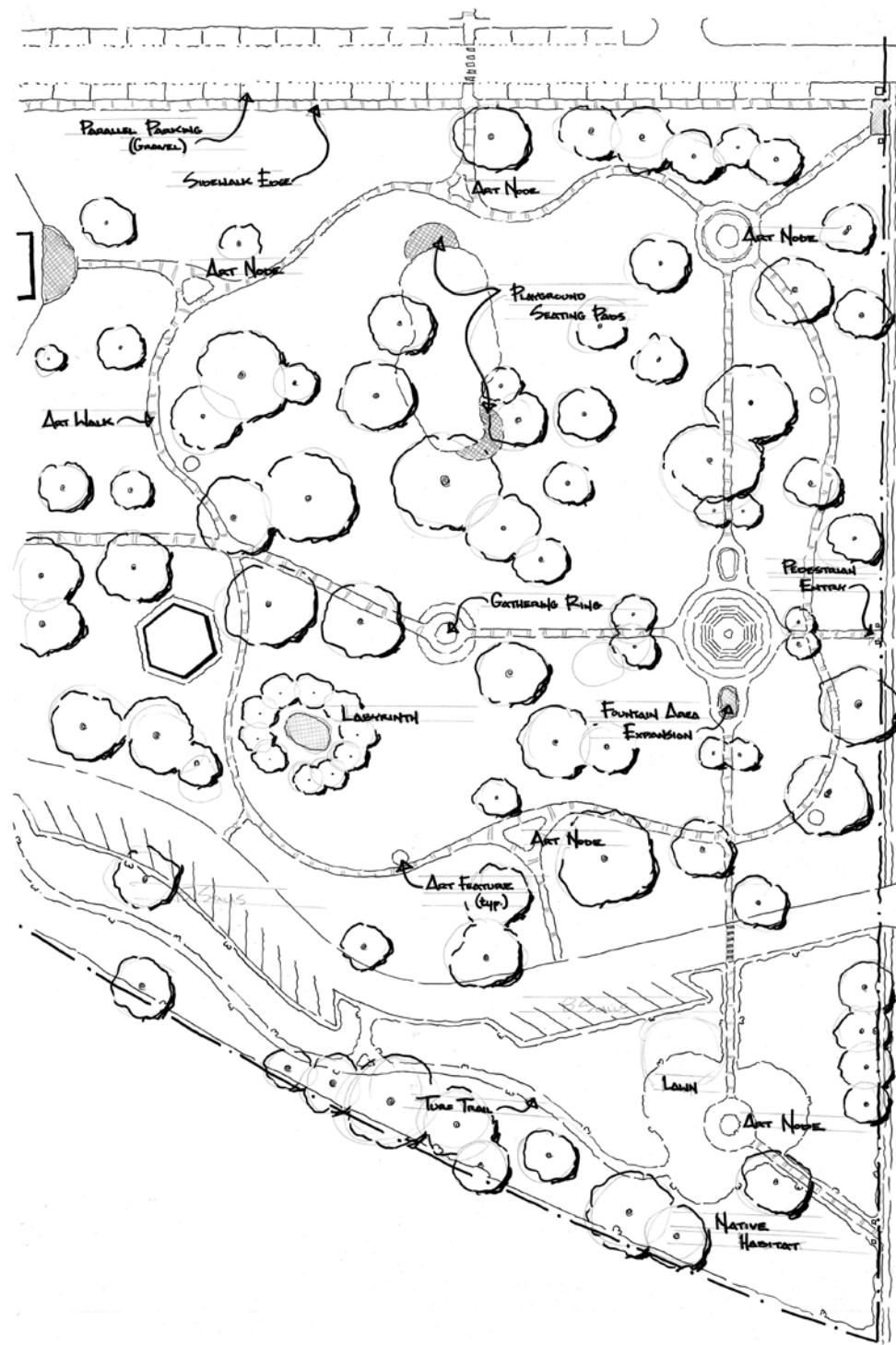


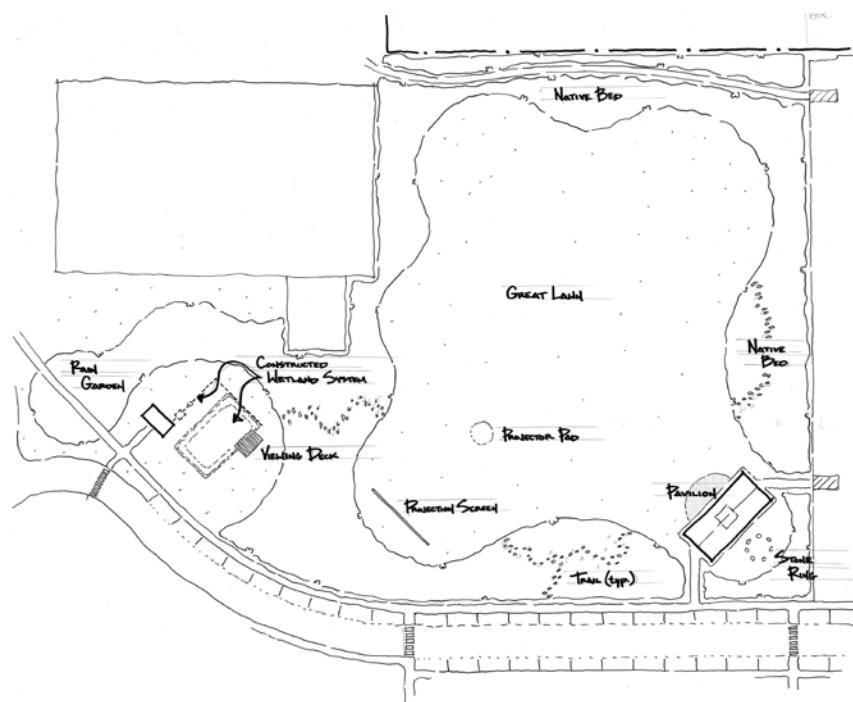
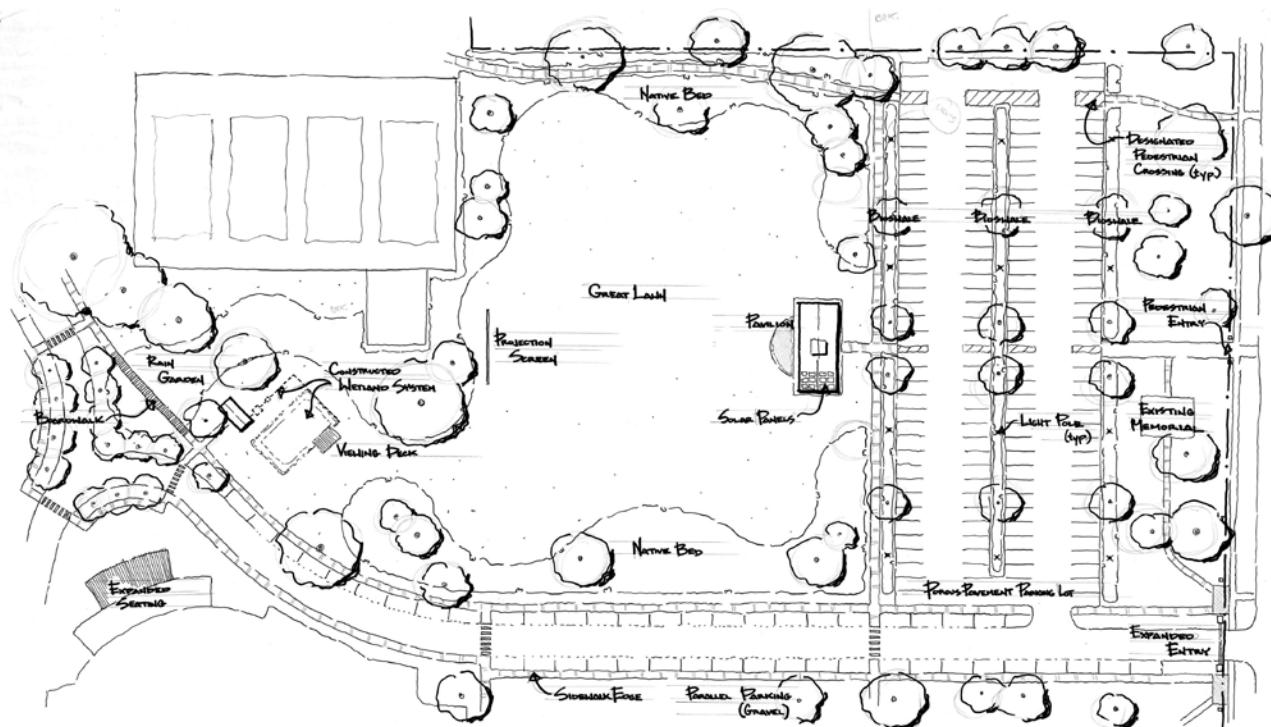


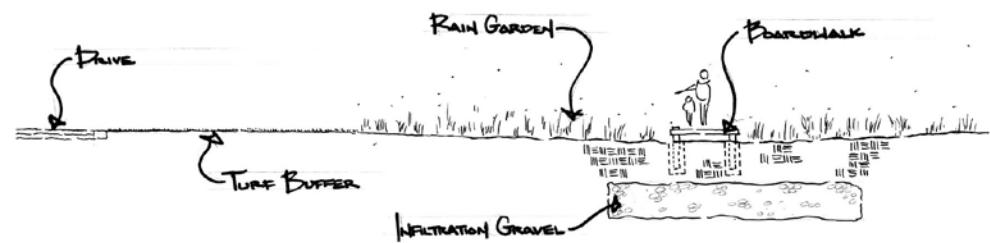
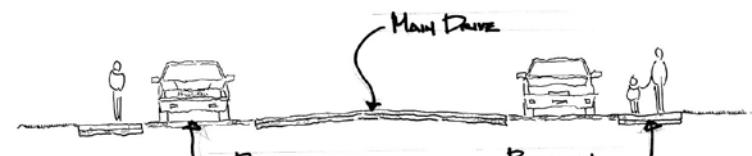
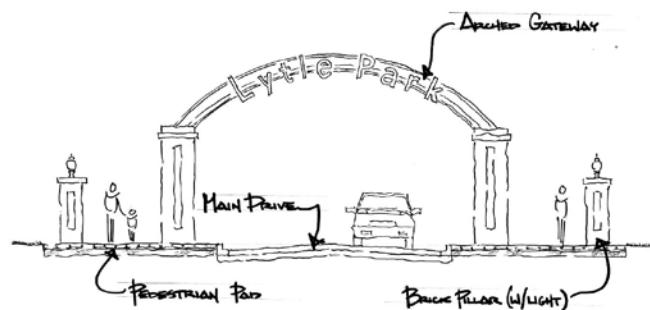
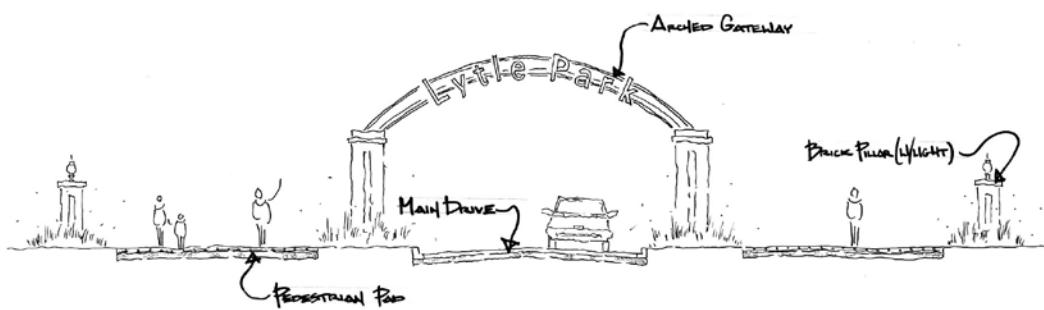
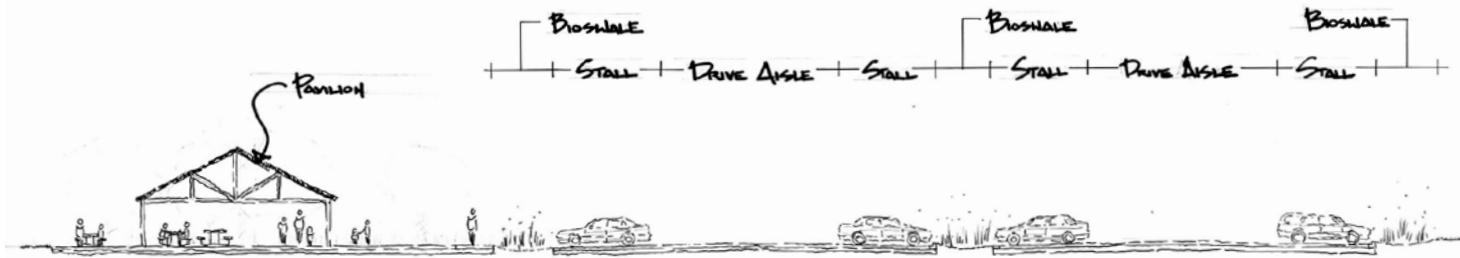
Preliminary Concepts

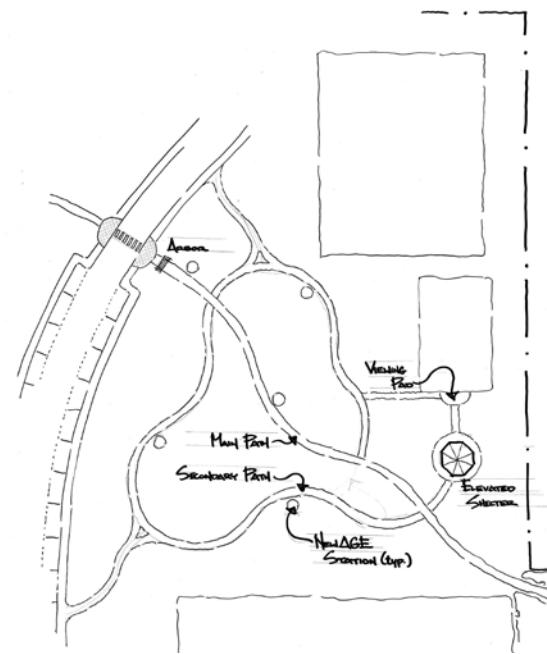
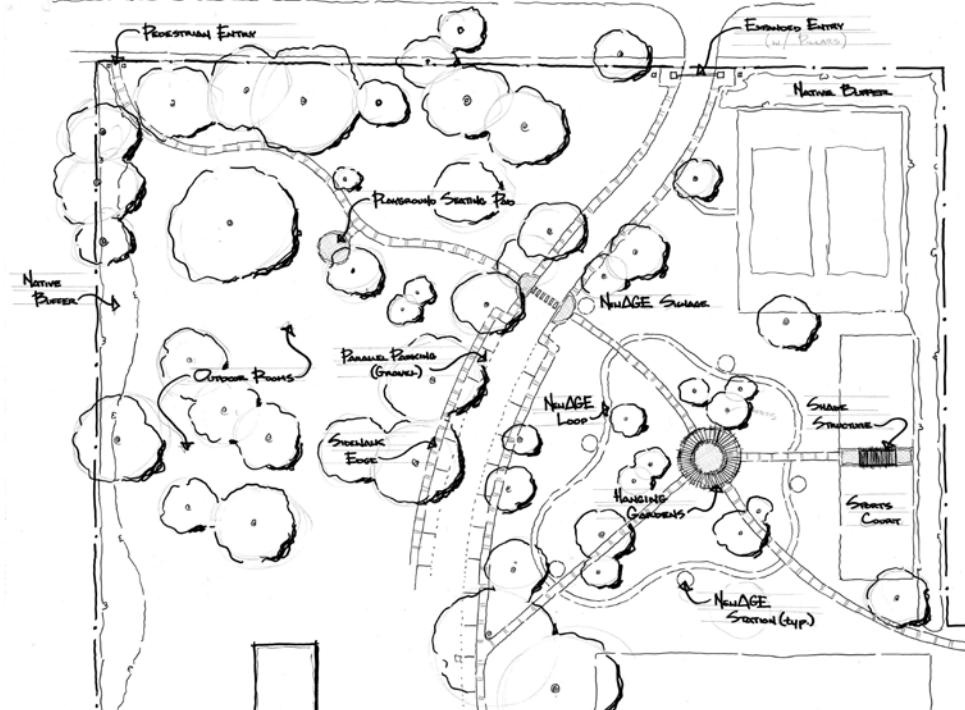
The diagrams shown here depict the first stages of the design process. Working closely with Justin Grady, goals and objectives were articulated through plan graphics and imagery in order to shape the draft Master Plan. The plans and graphics were discussed with the Park Board and then refined into the Master Plan shown in this book. During the Master Plan process, WRD Environmental identified a specific grant – the Illinois Green Infrastructure Grant (IGIG), to apply for. If awarded, IGIG will help fund a significant portion of the site development identified in the Master Plan and will be a large step forward in realizing the sustainable vision for Lytle Park.

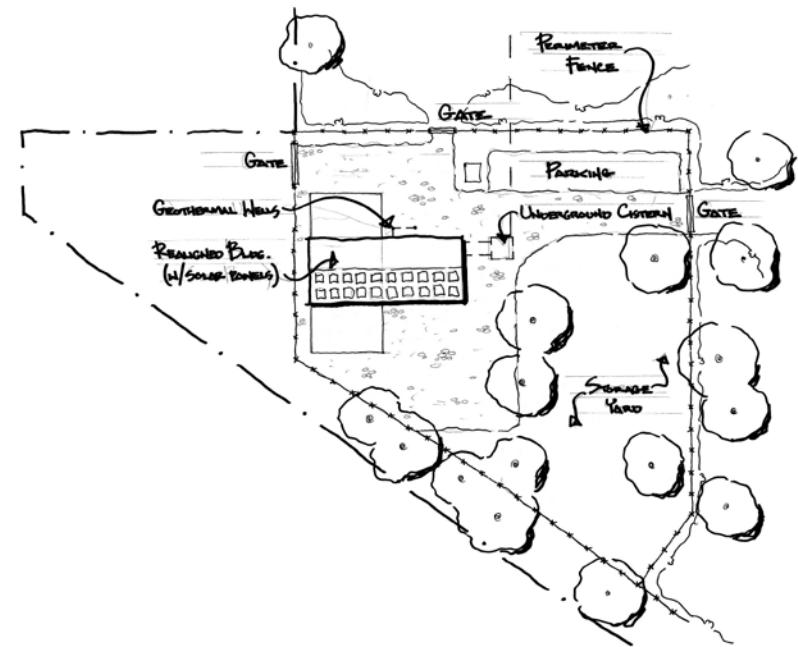
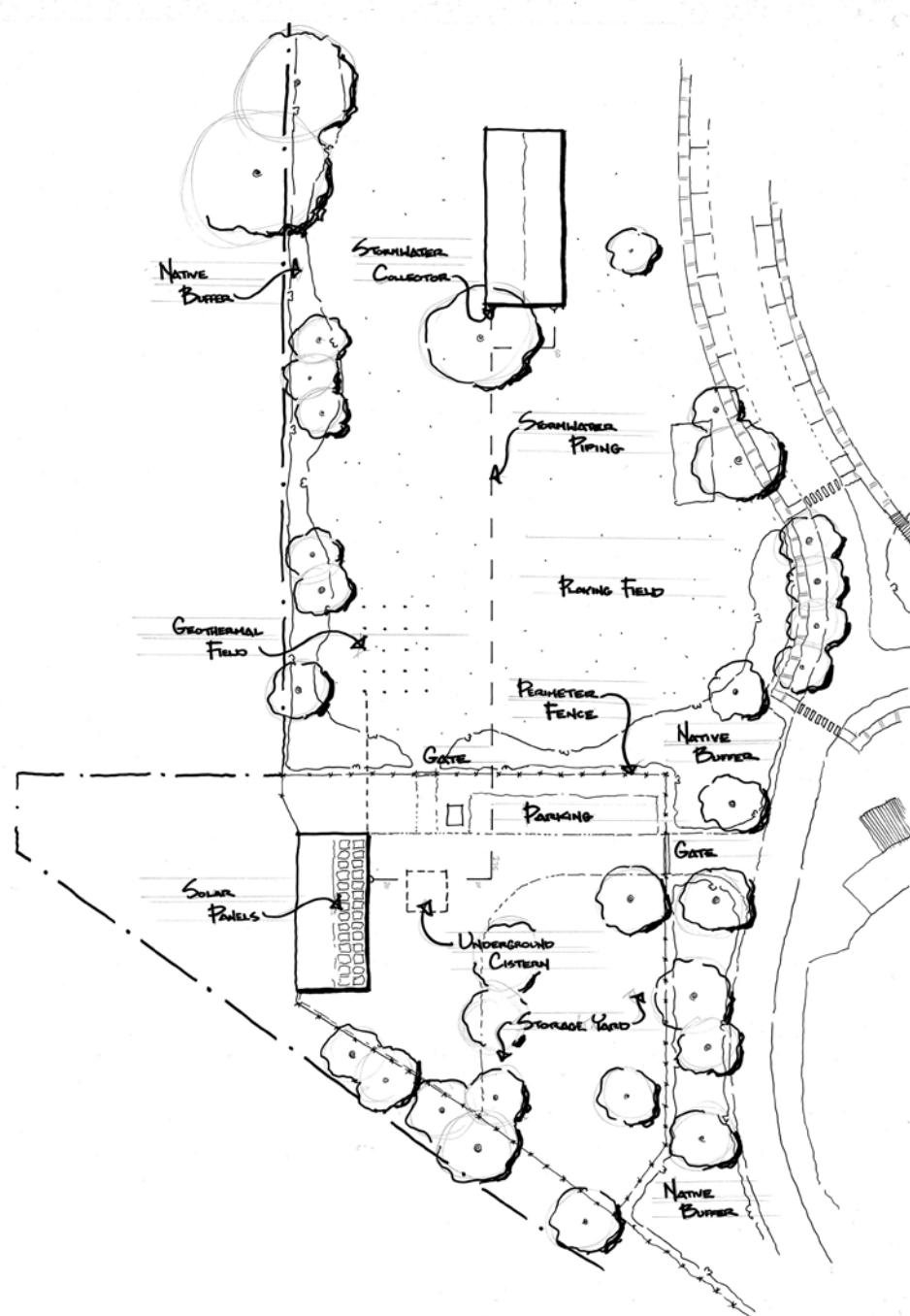














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