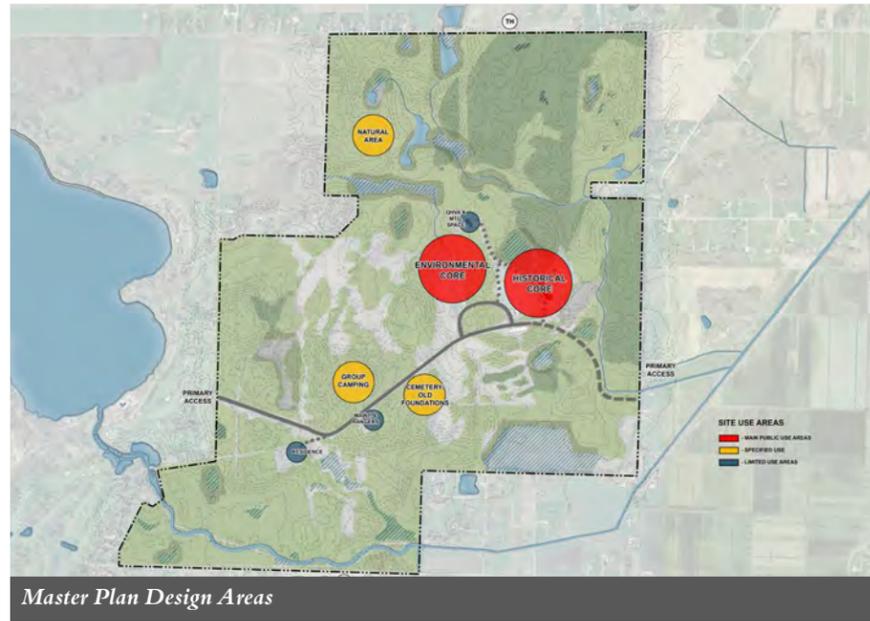


# ENVIRONMENTAL CORE



Master Plan Design Areas



Environmental Core Concept



Environmental Core Plan

**ENVIRONMENTAL CORE**

**Pond Recreation Area**

The Pond Recreation Area includes the Shady Lane Pond, Picnic Area, Shelter, Natural Playground, surrounding grounds, and supporting vehicular and pedestrian circulation.

At the Pond Recreation Area, a multi-leveled, reshaped and expanded pond and wetland habitat provide opportunities for fishing, wildlife observation, and environmental education. A large shelter and natural playground overlook the deepest area of the pond, while a new Nature Center takes advantage of the shallow southern extension and surrounding wetland areas. Between the two buildings, an open grass lawn provides space for relaxation and small group activities.

The Pond Recreation Area will be accessed by the Loop Road with parking located at the base of the eastern hillside which will maximize open space for public enjoyment.

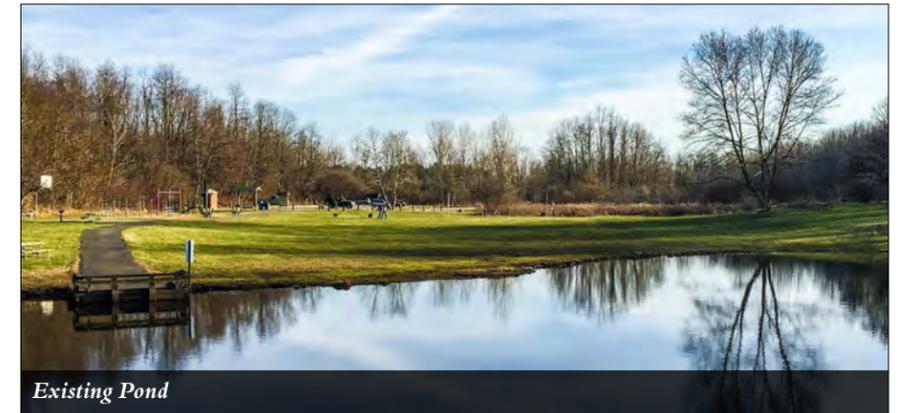
**Shady Lane Pond**

Ponds can make great park amenities. That is, ponds that sustain healthy aquatic life (fish, amphibians, insects, and plants), are pleasant to look at, and are designed to be safely enjoyed by a variety of park visitors, can stand alone as a destination, or in this case, complement the other exciting features of Quail Hollow. A well-designed pond with the proper amenities can be a place where grandparents take their grandkids fishing, teenagers catch frogs, and teachers instruct their students on subjects such as ecology, biology, and riparian ecosystems.

The existing pond at Quail Hollow, however, is simply inadequate. The Design Team observed the pond and found that it lacks aquatic life, the water quality appears poor and stagnant, and it does not fulfill the desires of Park visitors as evident in the feedback received during the Master Plan process.

After careful consideration, including evaluations of the surrounding topography, hydrology, and feedback from SCPD, a revitalized pond was conceptualized. As shown on the Master Plan, the pond’s location and configuration is carefully coordinated with other proposed elements such the future nature center, shelter, trail network, playground, and nearby parking. What’s not shown on the Master Plan are the following overriding goals and design philosophies that should be considered during future design phases of the pond:

- Enlarge the existing pond. This will improve water quality, create opportunities for a variety of habitats, and accommodate more people. It is best if one cannot see the entire pond from a single vantage point; this makes the pond appear much larger and makes the pond more interesting. The pond should also be visible from the main entrance drive to encourage visitors to come and explore the area.
- Construct the pond for fishing. Identify locations where people are likely to fish, such as off the pier and points along the bank, and locate abrupt grade changes, drop-offs, and underwater structures nearby. These elements create ‘cover’ and will naturally attract fish to the fisherman.
- Create opportunities to interact with the water. Boardwalks and piers that extend into the pond can provide year-round interaction and are safe for seniors and those with mobility difficulties. Properly designed edges can provide opportunities for wading, fishing, and skipping stones.
- Install a shallow ledge around the perimeter of the pond. This ‘bench’ is a safety feature that prevents someone who might fall into the pond from being in a water depth over their head. The bench should be five feet wide, the depth however can vary but should not be more than 30 inches. Cattails typically do not grow in water more than 15 inches, so by varying the depth of the bench one can control where cattails grow. A few look nice, too many are a problem.
- Utilize the pond for green infrastructure. By diverting storm runoff from impervious areas, such as parking and roofs, it can be detained and filtered before it is released off site. This mitigates flooding, and pollution, and can be used to satisfy state and local design requirements.
- Brand the pond. Either change or reinforce its name so that people will remember with a connotation that supports its purpose. Such as ‘Good Times Pond’. So often, park ponds have large signs posted with a long list of rules: don’t fish, don’t wade, don’t throw rocks, and so on. The pond at Quail Hollow should be enjoyed. It should be designed as an integral part of the park’s features and programs meant to attract visitors or pleasantly surprise someone visiting the Manor House who discovers the pond by mistake.



Existing Pond



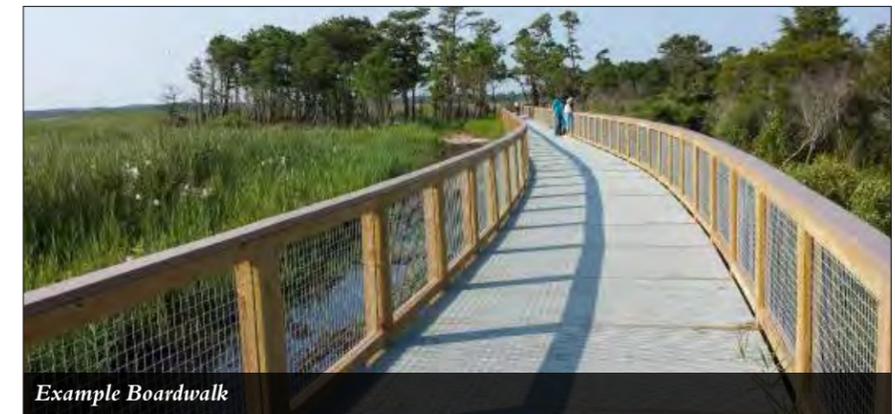
Existing Pond – Fishing Pier



During detailed design and construction, the following should be considered:

- Subsoils should be evaluated prior to the pond’s construction to determine if they are adequate to hold water. Mitigate with clay, liners, or bentonite if needed to reduce the likelihood of the pond leaking.
- If it is determined that the pond level will fluctuate throughout the year, a re-charge well should be installed to maintain a minimum water elevation. This works similar to a swimming pool where a mechanical ‘float’ indicator will activate a pump in a well if the water should drop to an unacceptable predetermined level. Local factors such as evaporation and natural drainage into the pond will determine fluctuations. Frequent fluctuation in the water level, among other things, creates an unattractive pond edge and causes difficulty for aquatic life.
- The entire perimeter of the pond should be accessible. A frequently mowed and maintained grass path is preferred. This does not mean that the entire perimeter of the pond should be lawn; rather, the pond edge should contain a mix of native trees, low shrubs, marsh plants, rocks/boulders, and other natural elements. Some parts of the edge should be aggregate, allowing easy entry into the water.
- The pond should be designed to overflow in a predetermined and desired route. Often referred to as ‘major routing’. This happens during a large rain event when too much water flows into the pond. This excess water should flow away from buildings, shelters, and parking areas. The pond illustrated on the Master Plan conceptually routes to the south through a series of constructed wetlands. This is consistent with the overall natural terrain. Each wetland should be a feature of interest with native plant colonies, varying depths, and pools to create interest. Three wetlands are shown on the Master Plan, each interconnected to receive overflow from the pond. Pipes will be used to convey water under the existing and proposed roadways, and a properly designed outlet should be installed at the terminus to dissipate the water’s energy and minimize erosion.
- The construction of the pond should be coordinated with other projects to ensure the soil is efficiently utilized within the Park. Topsoil is ideal for mounding, gardens, and establishing prairies, while the subsoils can likely be used for roads, parking, and elevating trails.

- Increasing the size of the pond cuts off pedestrian access from one side to the other. As a result, an important trail connection (north-south connector to the Manor House) is cut off. To remedy this, a pedestrian bridge is proposed at the approximate mid-point of the pond. A slightly wider bridge of 14’, versus eight feet for other pedestrian bridges proposed in the park, is recommended to allow space for people to safely pause and enjoy the view without restricting faster pedestrian movements. Per the pond configuration illustrated on the Master Plan the bridge will be approximately 120’ long.



Example Boardwalk



Example Observation Platforms



Example Nature Exhibit

**Nature Center**

The existing Nature Center will be relocated to the Pond Recreation Area. Located on the southern edge of the pond, it will be visible from the main entrance drive and have views up the length of the rehabilitated pond and adjacent wetlands. These adjacencies will provide great opportunities for observation and education.

The new building will house an array of nature programming with its wildlife viewing areas, animal exhibits, two classrooms, and a small gathering and break-out space. In support of both the interior and exterior programming that may occur, a catering kitchen, equipment rental center, administrative offices and public restroom facilities will be included. The building design itself should provide further educational opportunities around sustainable building and living practices. Based on anticipated programming, the total building area will be approximately 9,500 SF.

Access to the building will be provided via a passenger drop-off zone directly east of the building or by a 10-foot wide limestone trail that will connect the entrance of the building with the adjacent greenspace, parking, shelter and natural playground.

**Picnic Area**

A small, informal picnic area will be located across the pond from the shelter. Shaded by trees, picnickers will be able to enjoy multiple views of the pond and fish from shoreline.

**Shelter**

Overlooking the rehabilitated pond and forests to the west, a large shelter will be located to accommodate eighteen(18) six-foot tables. This shelter will be designed per SCPD’s large shelter standard with stone columns, wood beams, tongue and groove decking, and a large stone fireplace anchoring it at one end. Park visitors will have the ability to reserve the space for picnics, birthday parties, and waterfront cookouts year-round. Public restrooms will be provided within the shelter structure or as a stand-alone building. During the implementation phase, SCPD will determine if the restrooms should be vault or flush fixtures.

**Natural Playground**

The natural playground will encourage the young and those young at heart to engage with the environment by utilizing natural components to create inspiring spaces to play and explore. Tucked into the hillside under the tree canopy, the playground will overlook the northern end of the pond. When not playing alongside their children, parents may keep an eye on their children from the adjacent shelter. The playground may utilize logs and boulders harvested on-site to create seating, balancing, and climbing opportunities for children and adults alike.



Example Picnic Area



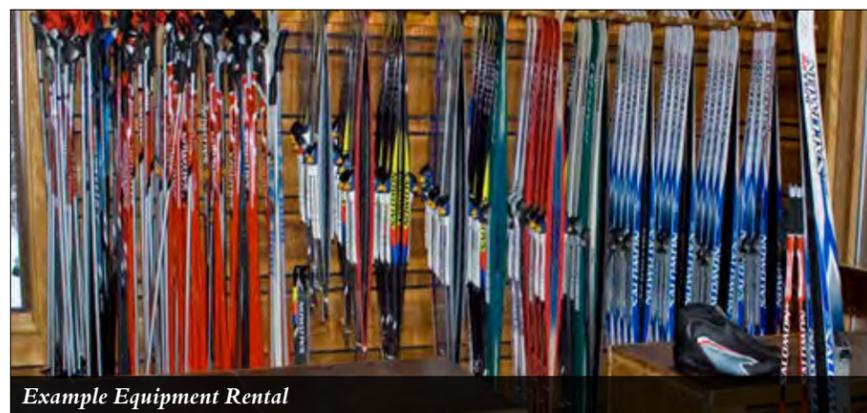
Example Shelter



Example Natural Playground

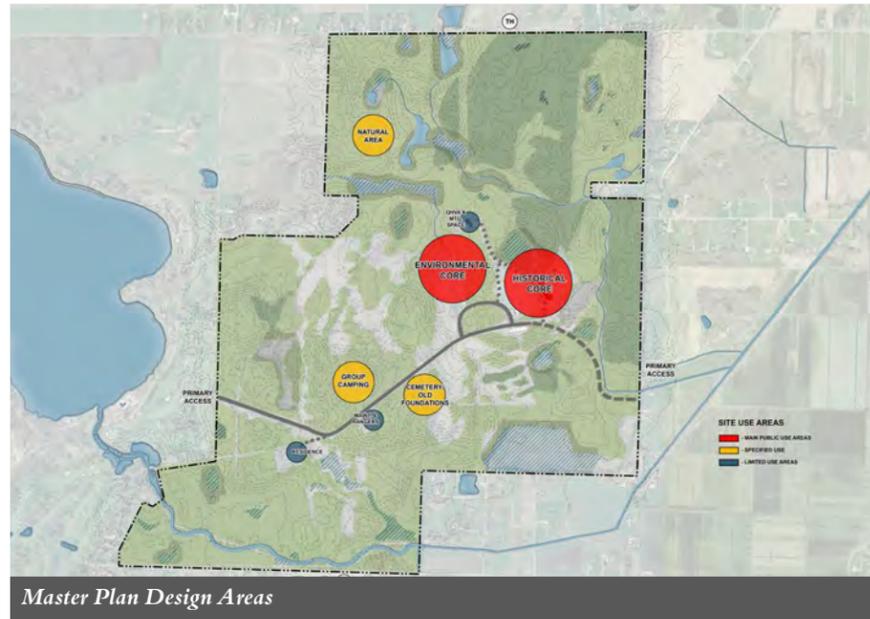


Example Nature Classroom



Example Equipment Rental

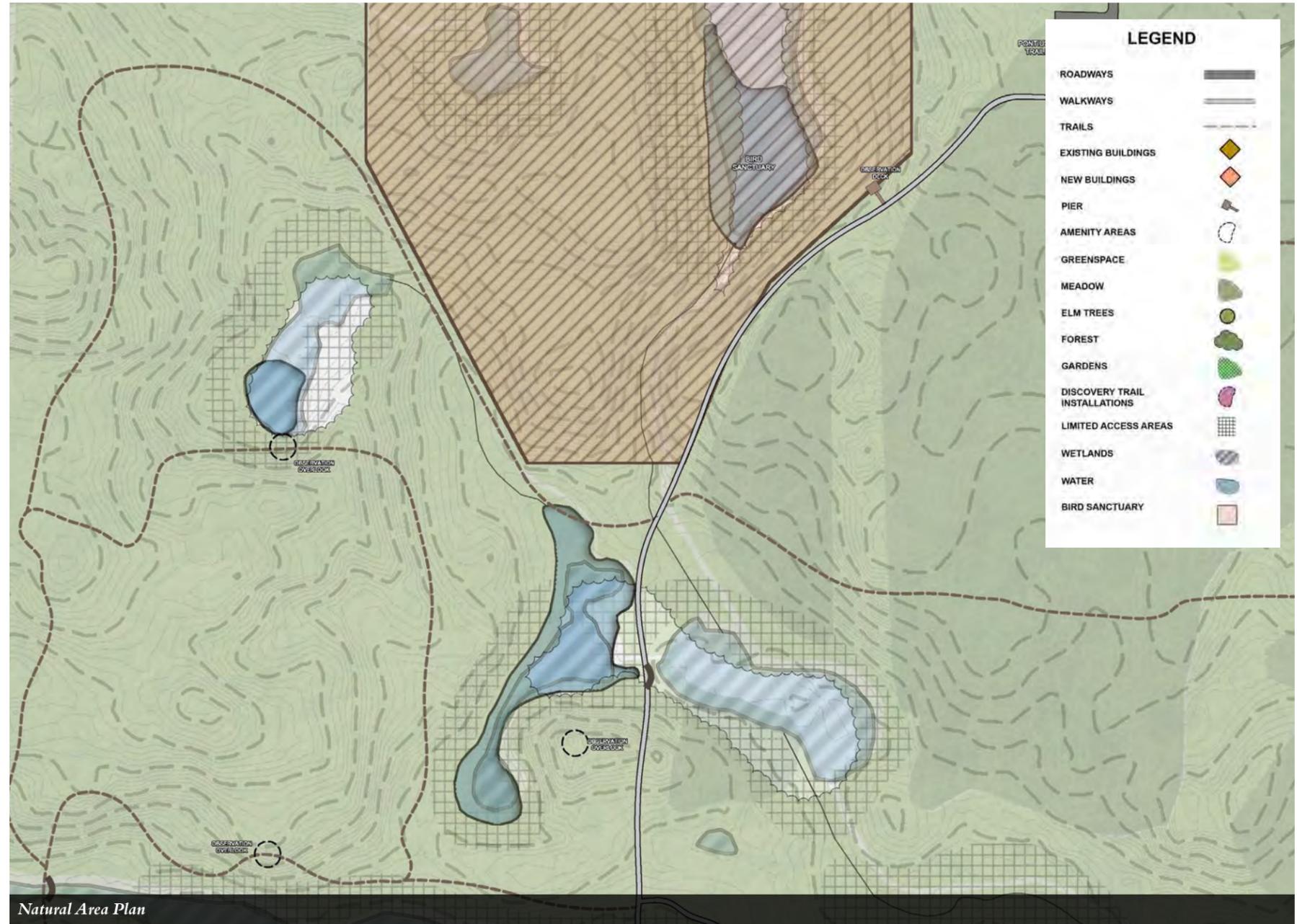
# NATURAL AREA



Master Plan Design Areas



Natural Area Concept



Natural Area Plan

**Nature Education and Observation Areas**

The Nature Education and Observation Areas include the Bird Sanctuary and Observation Platform, Nature Education Area, and Trail Observation Areas.

The park has many unique natural areas. The Design Team worked with SCPD staff to identify areas that need to be protected to allow habitats to regenerate, others that should be protected, but viewed by the public to build appreciation, and finally others that should invite the community in to explore the depth of what nature has to offer.

**Bird and Nature Sanctuary and Observation Platform**

Located along the northern property boundary, the 7-acre Bird and Nature Sanctuary is protected in the deed between the Stewart Family and ODNR. Per the deed, the sanctuary shall be “managed in such a manner as to perpetuate existing natural conditions conducive to wildlife. No management program shall be instituted or implemented that will adversely affect the above-mentioned purposes.”

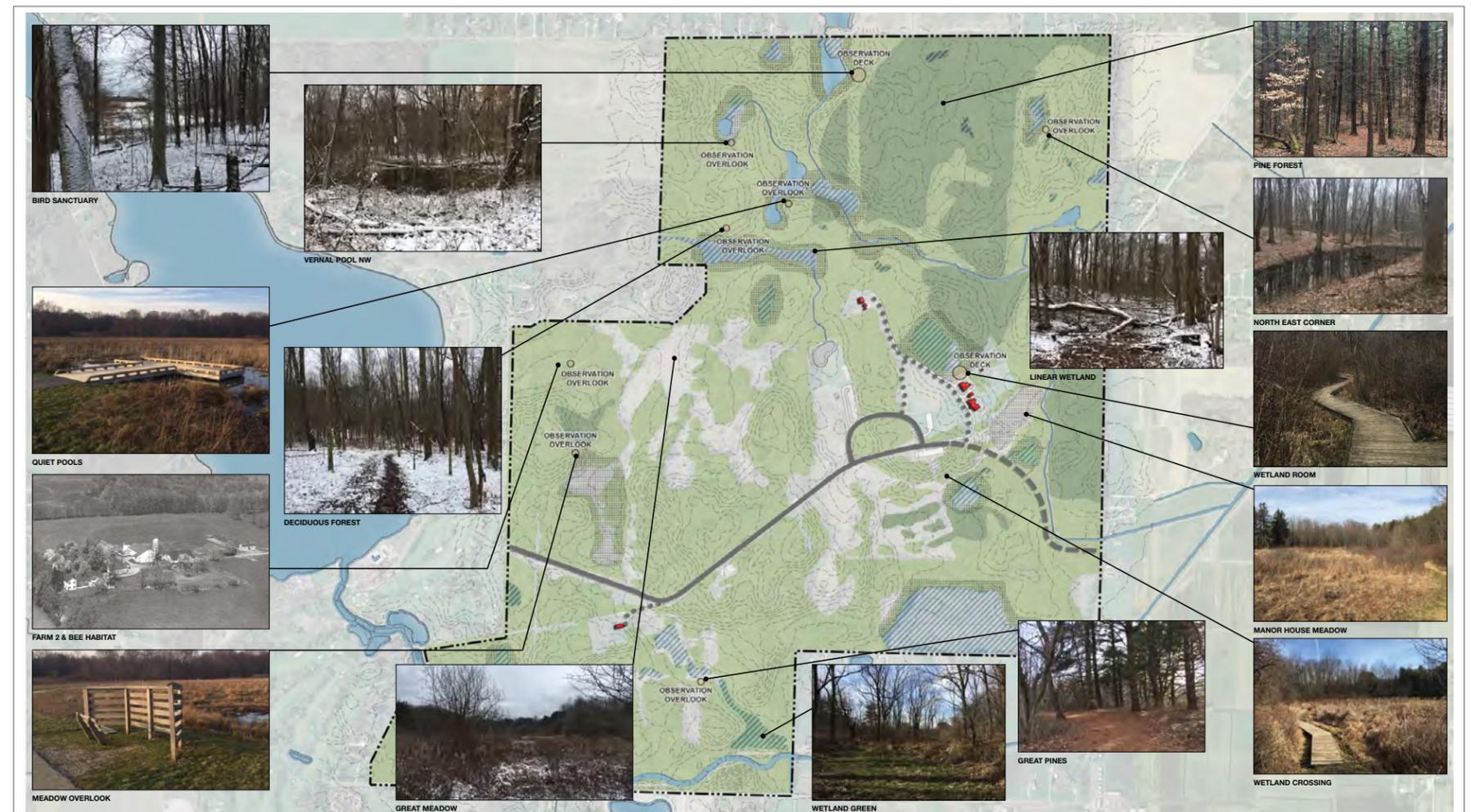
The sanctuary is primarily composed of a deep ravine, pond, and wetland area along Pontius Road. The pond outlets into a stream that flows through the center of the park and into the wetlands. The current trail system provides an ascending route along the ravine’s eastern edge. A single bench provides visitors with an opportunity to rest and observe the wildlife. The existing trail will be maintained as part of the North South Connector. The Pontius Road Trailhead will provide visitors with physical disabilities the opportunity to access the trail and view the sanctuary. An observation platform will provide a unique overlook into the forest canopy. The platform will not encroach upon the protected area and the final design will be determined during the Implementation Stage.

**Nature Education Area**

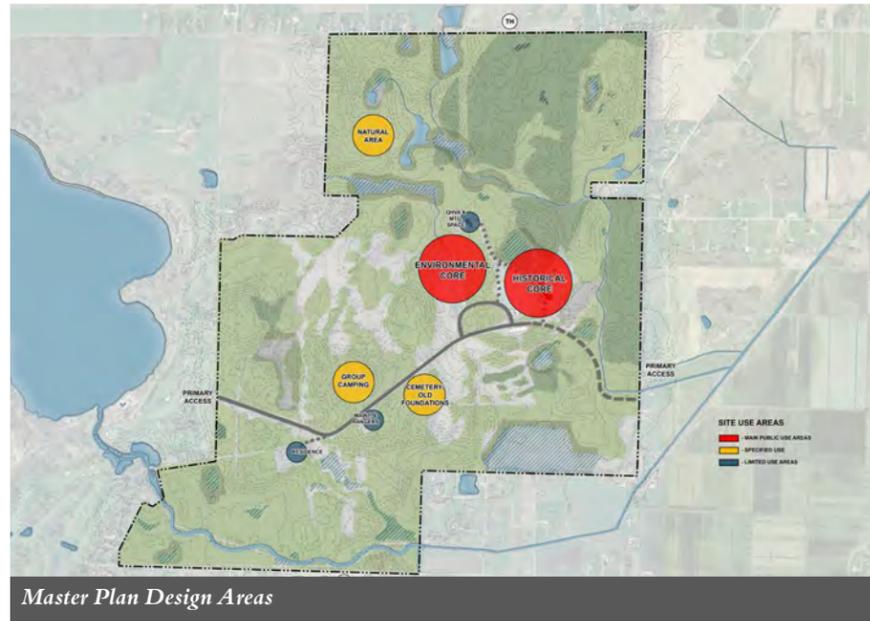
Just west of the Bird and Nature Sanctuary in the northwest corner of the park, vernal pools, hidden wetlands, and forested knolls, provide a great opportunity for informal education. Trails in this area will be designated as part of the Nature Education Area. Interpretive signs will mark the points of interest along the trail.

**Trail Observation Areas**

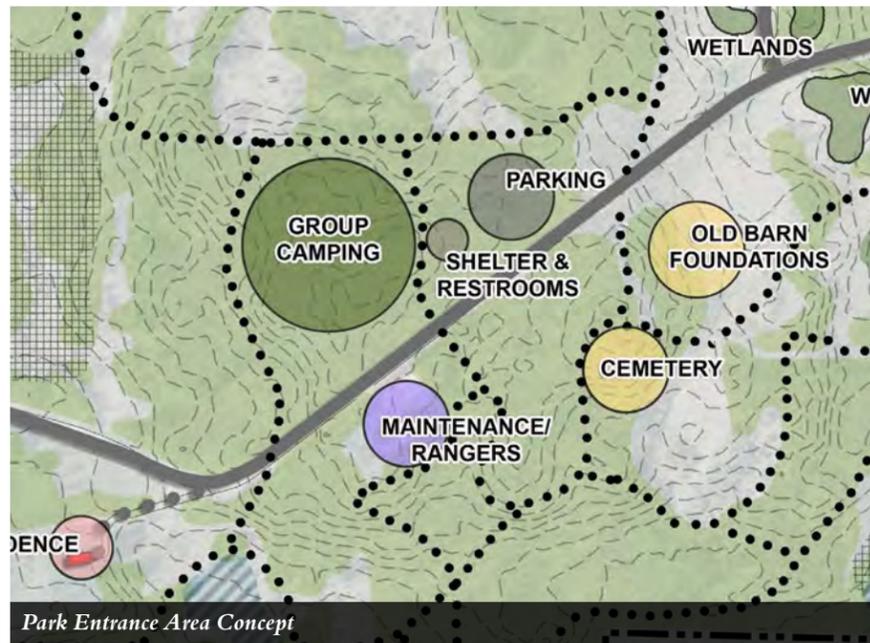
From the vernal pools, to grassy wetlands, to vast meadows and tall pine scented forests, Quail Hollow Park has a plethora of unique natural environments to explore. The trail system will allow hikers to discover these special places. Along the trails, informal observation areas will be identified with a simple bench and a small interpretive sign to signify that this is a special place to rest, relax, and enjoy the view.



# PARK ENTRANCE AREA



Master Plan Design Areas



Park Entrance Area Concept



Park Entrance Area Plan