



MASTER PLAN PREPARED FOR:
MILL CREEK METROPARKS
VICKERS NATURE
PRESERVE

MARCH 2020

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PROJECT OVERVIEW 01

INTRODUCTION

Mill Creek MetroParks (MCMP), known as Ohio's first Park District, was established in 1891. In total, the park boasts a total of about 4,500 acres that span throughout Mahoning County, ranking it among the one of the largest metropolitan-owned park systems within the city limits of a U.S. city. Vickers Nature Preserve (VNP) serves as one of the nine nature preserves within the park system. VNP encompasses 262 acres along West Akron-Canfield Road (Route 224), within Ellsworth Township.

Historically, the trails within the VNP property were logging trails. Currently, VNP is home to several equestrian facilities that cater to various users: those who attend an event, those who practice skills, or those who ride on the wooded trails. In addition to equestrian use and trails, the park boasts diverse habitats such as meadows, woodlands, wetlands, ponds, and streams. Expand park amenities to attract new users and become a better resource.



VISION

Revitalize the lower third of property to:

1. Attract **local and regional non-equestrian users** to a diverse space for those seeking a new experience, a calm space, and outdoor enthusiasts alike.
2. Invite **potential new equestrian users** to the park.
3. Welcome the **existing equestrian community** into the space.

PROJECT GOALS



Attract park users who want to: hike, picnic, fish, bird watching, and more. Additionally, attract local residents who do not use equestrian facilities.



Incorporate sustainable site design solutions, such as green infrastructure and including educational watershed signage.



Incorporate thoughtful circulation – separate vehicle and pedestrian / equestrian routes and increasing parking lot size and accessibility.



Be courteous to neighbors – create buffers along property edges and be intentional with trail placement.



Provide upgraded, modern facilities: paved parking, new restroom, playground, and stream crossing reinforcement.

MCMP envisions the park to become more inclusive and offer additional amenities for park users.

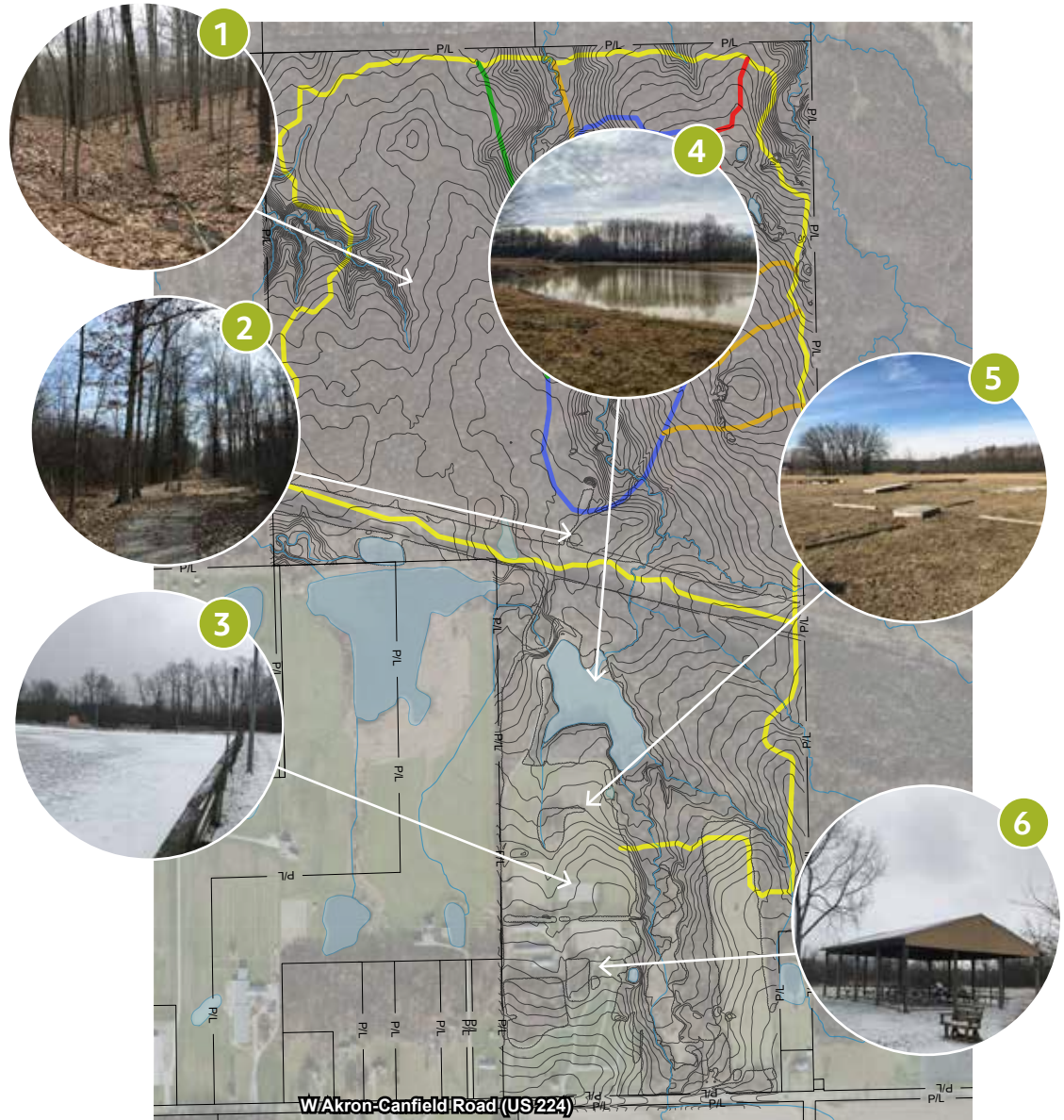
INVENTORY & SITE ANALYSIS 02

SITE INVENTORY

GPD conducted several site visits throughout the analysis and planning process. Challenges and key features are identified below.

- 1 Stream valley views from the trail.
- 2 Existing aggregate trail.
- 3 Existing equestrian Main Ring.
- 4 Existing pond.
- 5 International Mountain Trail Challenge Association sanctioned Challenge (mountain / trail) Course.
- 6 Existing pavilion near equestrian area.

Based on observation and site analysis of existing conditions, there are multiple areas that can be enhanced to showcase the parks natural beauty.



CIRCULATION & TRAIL ANALYSIS MAP

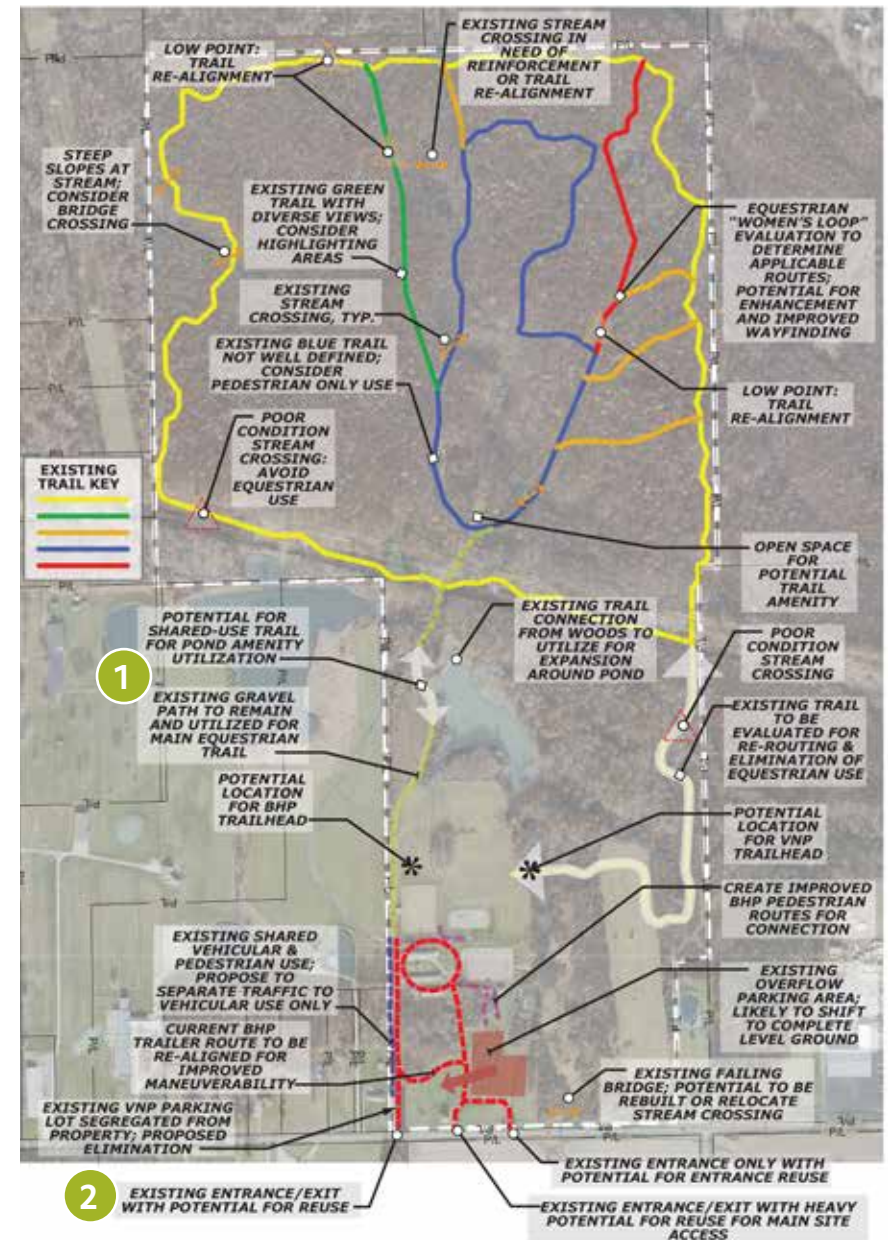
TRAILS

Current equestrian trails total approximately 5 miles throughout the property and two main trailheads at the front of the park. The northern route takes visitors past the pond and through the utility easement. The eastern trail routes visitors over the stream and to the existing meadow; eventually connecting north to the rest of the trails. Trail markers are located along the main segments while some of the trails are not well defined and rely on flagging to define the route. Due to heavy equestrian use, a few of the stream crossings and low-points along the trails are in poor condition.

VEHICLE CIRCULATION

The red dashed line represents the current site's vehicular circulation which includes towing trailers. Currently, there is a designated entrance and exit to the park. The exit is located to provide visual clearance for exiting the park in both directions. There is no clear flow for vehicles and tight turns make it difficult to maneuver in the stable area. The loop from the stables is located in close proximity to the property line which does not offer much privacy for the adjacent residential neighbors.

VNP also contains a separate entrance and parking area for general park visitors located along the west property line.



The park trails offer challenging hikes and unique experiences.

For larger map see Appendix, page A.1

ECOLOGY ANALYSIS MAP

There are many natural features across VNP which provide tremendous opportunities to create unique experiences for park users such as view points, wetland observation, interaction with nature, and educational features.

Any water collected on-site is carried through the stream system directly to the Meander Reservoir. This is a key feature to highlight as an educational opportunity for park users on how human interaction with the water system affects potable water.

The existing mowed lawn on the eastern side of the property can be restored as a prairie habitat for birds and pollinators.

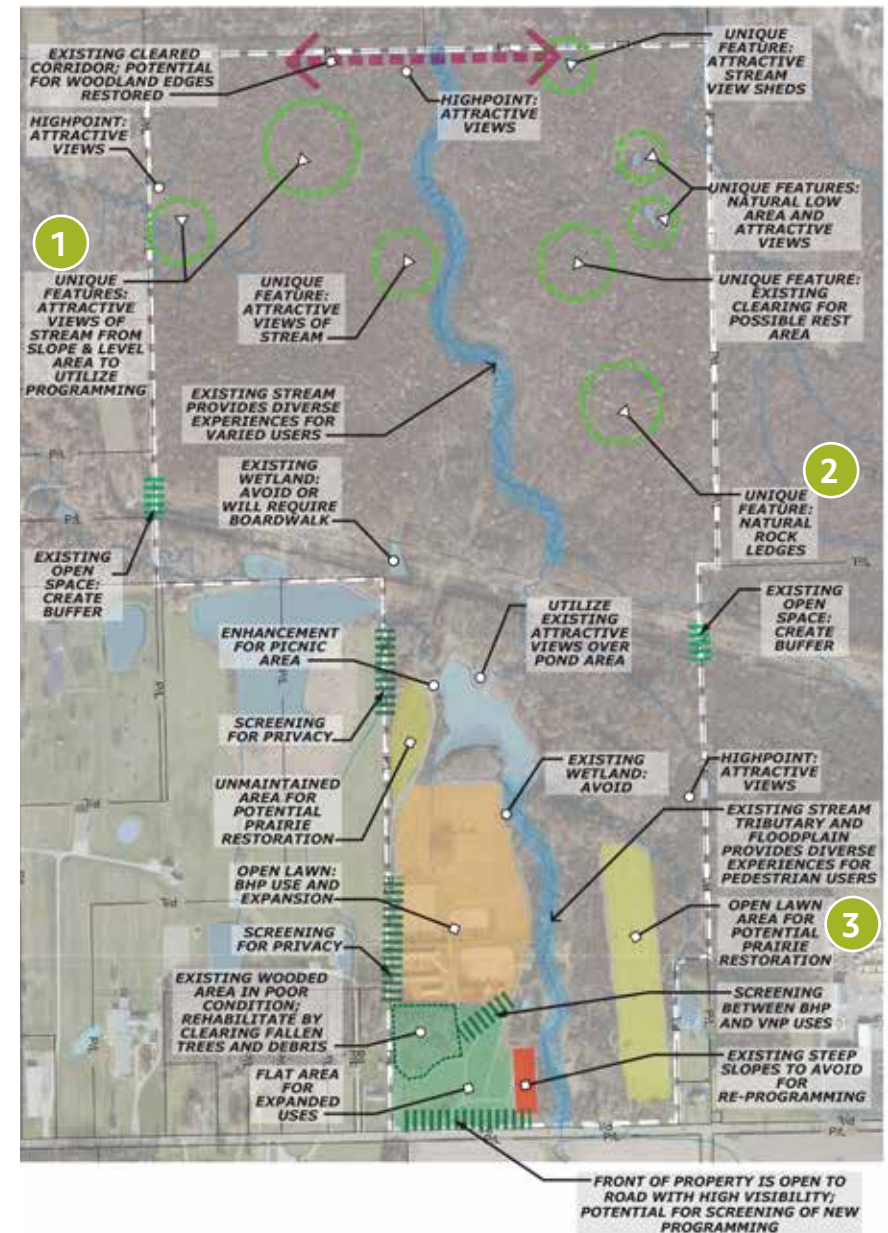
The existing pond and adjacent wetlands provide scenic views and can be utilized for fishing, picnicking, and wildlife observation.

Within the property, the stream's system geomorphology varies. South of the pond, the stream system is comprised of gentle slopes and a more developed floodplain. North of the pond, topography changes quickly with low valleys and high vantage points dotted along the landscape.

An area of natural rock ledges within the forested area can become natural play areas.



Stewardship strategies to support educating park users on the importance of water quality within the local watershed can create an environmentally sound space implemented by the Park.



For larger map see Appendix, page A.2

STRUCTURES AND UTILITIES ANALYSIS MAP

There are existing equestrian facilities such as arenas, stables, and a challenge course, as well as other facilities such as a vault restroom, office, and pavilion. Some of the existing facilities are equipped with electrical power and water.

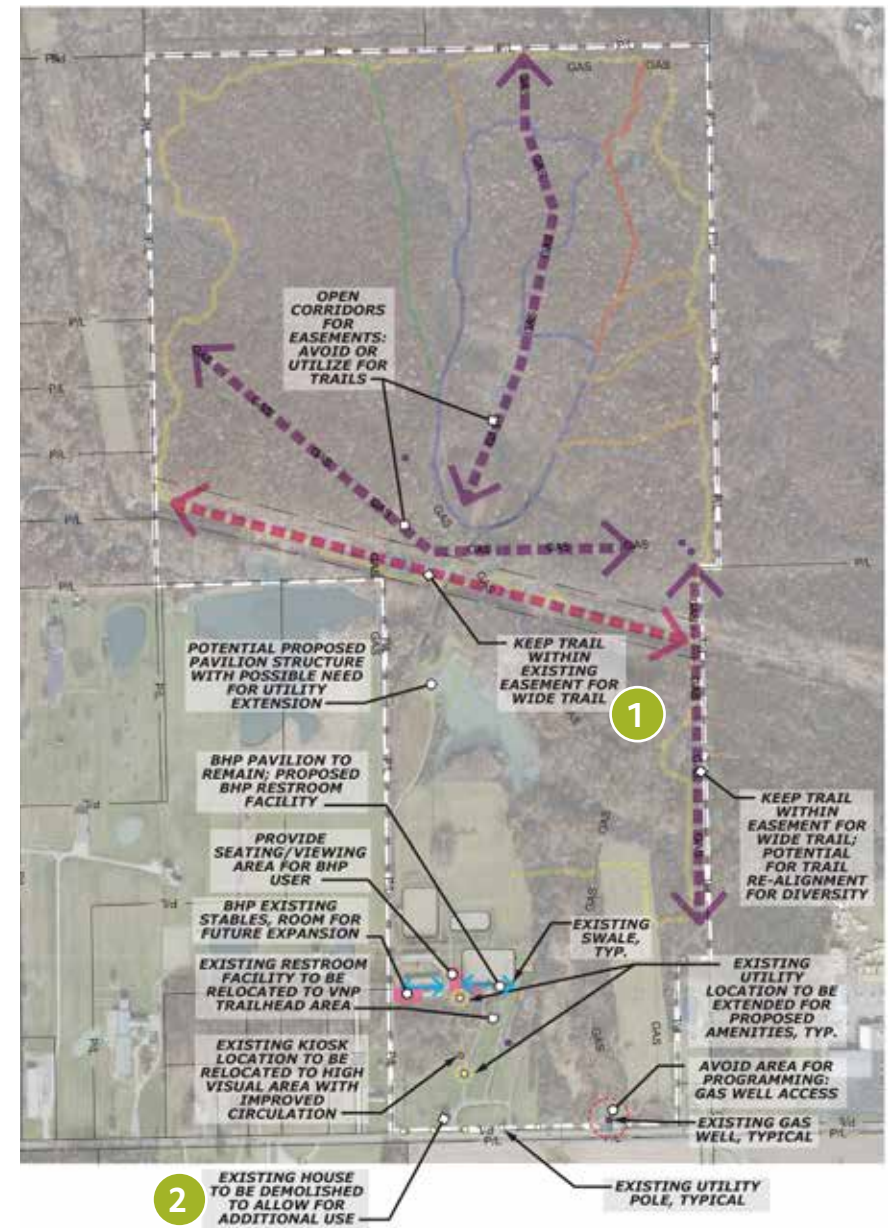
Existing equestrian facilities should be inspected for structural integrity. The existing pavilion can be improved for expanded and more frequent future use.

Multiple utilities exist within the property including: high voltage transmission lines, gas well services lines, and water. The easements are maintained as open corridors within the woods and could serve as trail alignments.

The existing house off of W. Akron Canfield Road (US 234) should be removed. The house would require significant investment to be restored and there is no immediate need for a park building.



Several equestrian facilities exist on the site and should be incorporated and improved upon in the master plan.



For larger map see Appendix, page A.3

SCHEMATIC DESIGN 03

PREFERRED ALTERNATIVE

The stakeholder team reviewed the alternates pros and cons and chose to move forward with the Concept 3 layout. Based on feedback, this preferred alternative incorporates some likable features from Concepts 1 and 2.

Aspects of the preferred alternate encompassed the following:

- One entry / exit drive to provide clear circulation and the safest option. Horse fencing along Route 224 will be continued up the main drive to the parking lot entrances.
- Trailer parking to the west maintains a portion of the existing woods to buffer the stables.
- Non-trailer vehicular parking to the east, with a sidewalk and bioretention buffer between it and the proposed park amenities.
- A new kiosk location at the trailhead to welcome users.
- Centralized proposed pavilion for rental use, to include outdoor patio seating as well.
- New restroom facility to be located adjacent to pedestrian trailhead.
- Playground near a large lawn space for play and recreation.
- Proposed walking trail to loop around playground and proposed pavilion which connects to equestrian facilities.
- Continuous trail which leads users to the east of the equestrian facilities for access to the rings, as well as continuation to the equestrian trail head which leads north.

The preferred alternative creates the intended spaces to attract park users, utilize thoughtful circulation, and provide updated facilities.

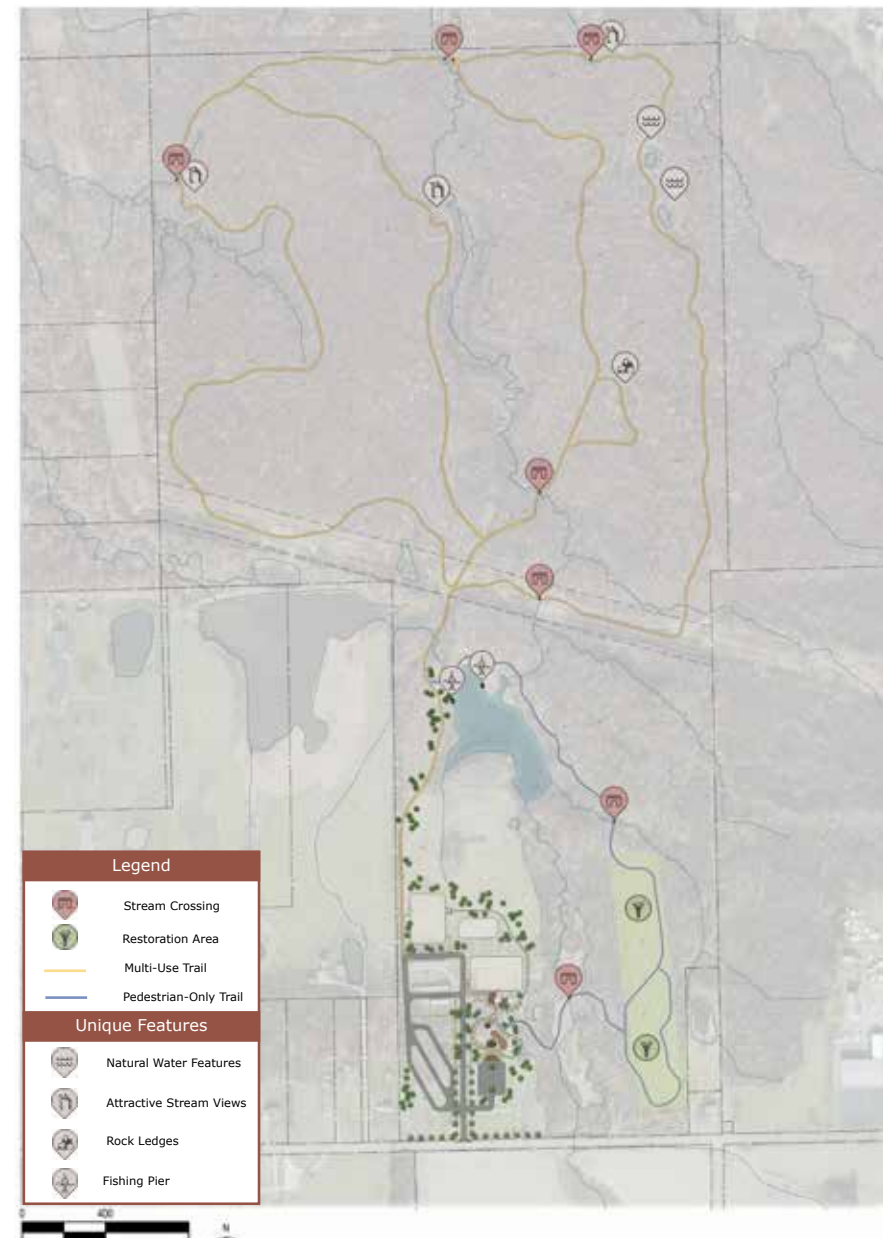


For larger map see Appendix, page A.5

PREFERRED TRAIL ALIGNMENTS

The proposed trails are labeled graphically for this map version. All stream crossings and unique features are labeled including:

- **Restoration Area:** includes transitioning the existing mown lawn area into a restored prairie to attract pollinators and assist in filtering surface water before reaching the Meander Reservoir.
- **Natural Features:** realignment of trails to bring hikers and equestrian riders to the unique features VNP has to offer: natural water features, attractive stream views, and rock ledges.
- **Fishing Piers:** Two fishing piers along the bank of the existing pond for park users to enjoy passive recreation.



For larger map see Appendix, page A.6

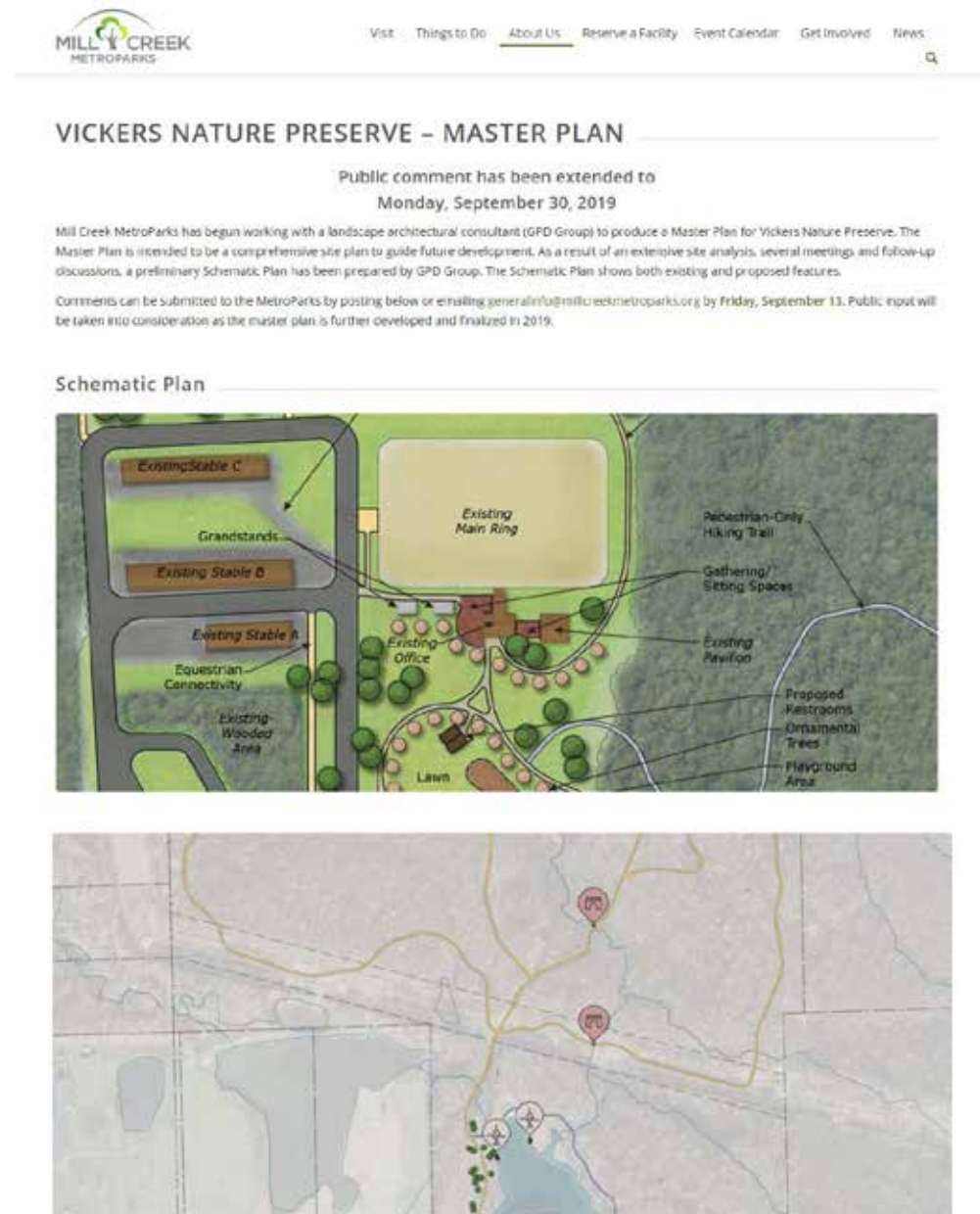
FINAL MASTER PLAN 04

COMMUNITY INPUT

The preferred schematic and trail designs were shared by MCMP to the public. Comments were received and compiled in house by MCMP. To be responsive to community needs, the following changes were included in the final design:

1. To improve circulation more for trailers, an additional drive in/out of the trailer parking area to be implemented.
2. With the amount of equestrian trails was to be increased. With this, all trails would be listed as multi-use, eliminating the pedestrian-only trails.
3. The existing Challenge Course to remain.
4. Proposed pavilion to be designed for 3-season use.

By integrating the public review process into the design, we are strengthening the Park's mission to be responsive to community needs.



PROPOSED FEATURES:

- Vickers Nature Preserve will attract new visitors by providing a wider range of activities.*

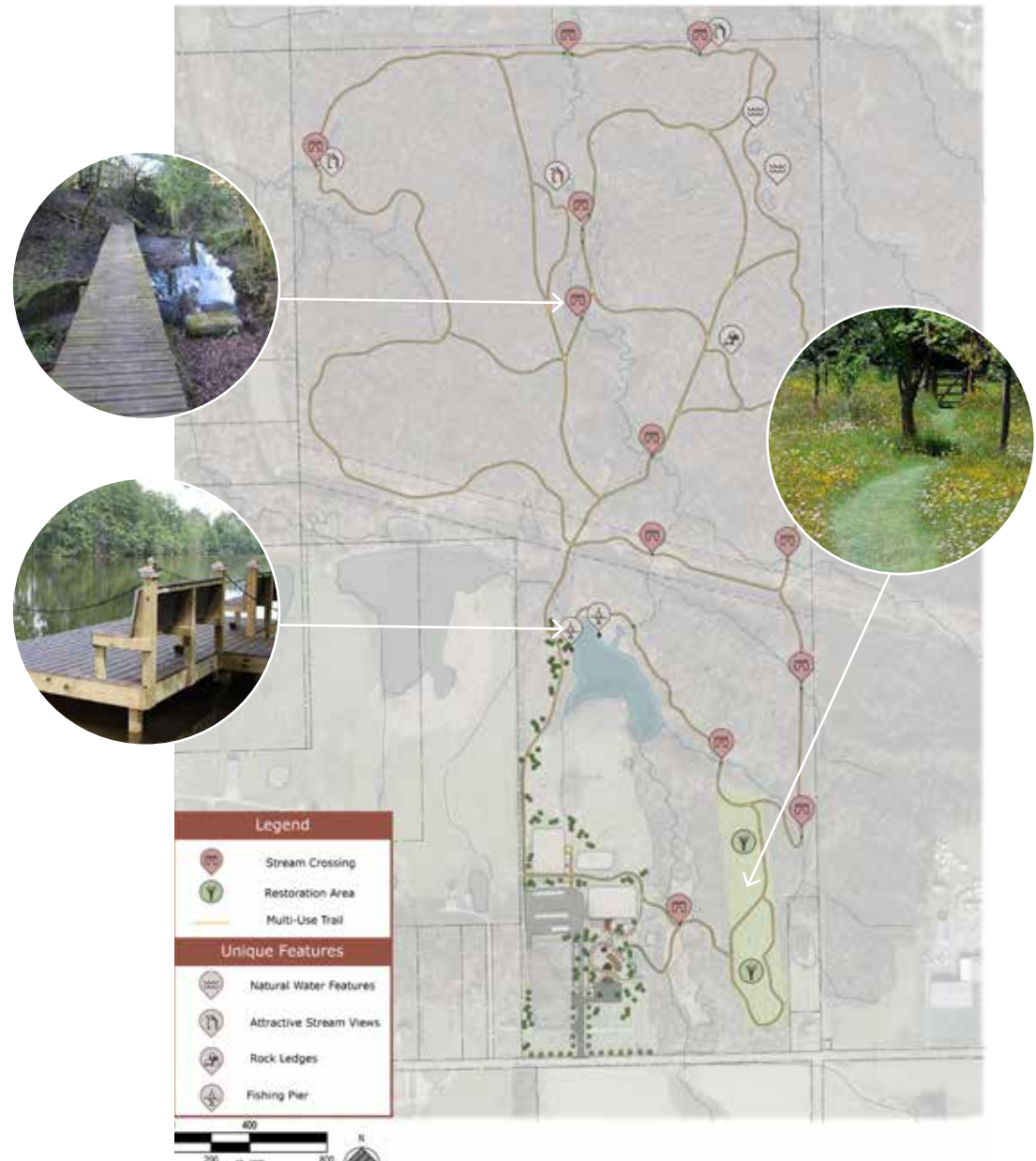


FINAL TRAIL ALIGNMENTS

The final trail alignments have increased the overall trail mileage. Trail alignments are shifted to create more buffer space along the property line of the park, as well as some rerouting to avoid disturbing wetlands or low lying areas.

PROPOSED FEATURES:

- Multi-purpose, gravel trails to accommodate park users on foot or horse.
- New trails through previously underutilized portions of the park like the prairie restoration area and around the wetlands adjacent the pond.
- Multiple trail connections to provide users with options of short looping or longer meandering hikes or rides.
- Proposed alignments allow park users to experience the unique features of the park's natural landscape



More than 6 miles of trails for hikers and equestrian riders.

For larger map see Appendix, page A.8

PARK AND TRAIL ELEMENTS

The following are representative images of potential park improvements.

FENCING

Along Route 224 and adjacent to the main drive of the park, split rail fencing will create a physical border as well as a pleasing aesthetic of a grand entry. Sandstone columns will finish off the terminal of a fence line.



GATEWAY

An overhead gateway structure will greet equestrian guests as they travel back to the stables and main equestrian area. Stone columns to match fence line will flank either side of the drive to create a stately gateway. Vickers Preserve will not have gates to allow for an ease of public entry / exit.



PLAYGROUND

A single, modular play structure will be incorporated with an equestrian / barn / farm theme.

PAVILION

The proposed pavilion shall be 3-season with a fireplace, as well as sandstone columns included. The existing pavilion is to be rehabilitated to match the quality and aesthetic look of the proposed pavilion.



REUSE OF BARNSTONE

The reuse of any barnstone found on site will be incorporated into the playground area for natural play, along trails for seating, and possibly as a boundary along waterway banks.



RESTORATION AREA

The existing lawn area within the front, eastern portion of the property is proposed to be restored with regionally-native plant species, with mown trails. This will attract local pollinators and species new to the site and provide habit and a food source.



MULTI-USE TRAILS

All proposed and existing trails to be built with limestone for considerate wayfinding through the property and reduction of soil erosion.



BIORETENTION

To collect, slow, and treat stormwater on site, bioretention will be implemented near the vehicular parking lot to capture stormwater from impervious surfaces.



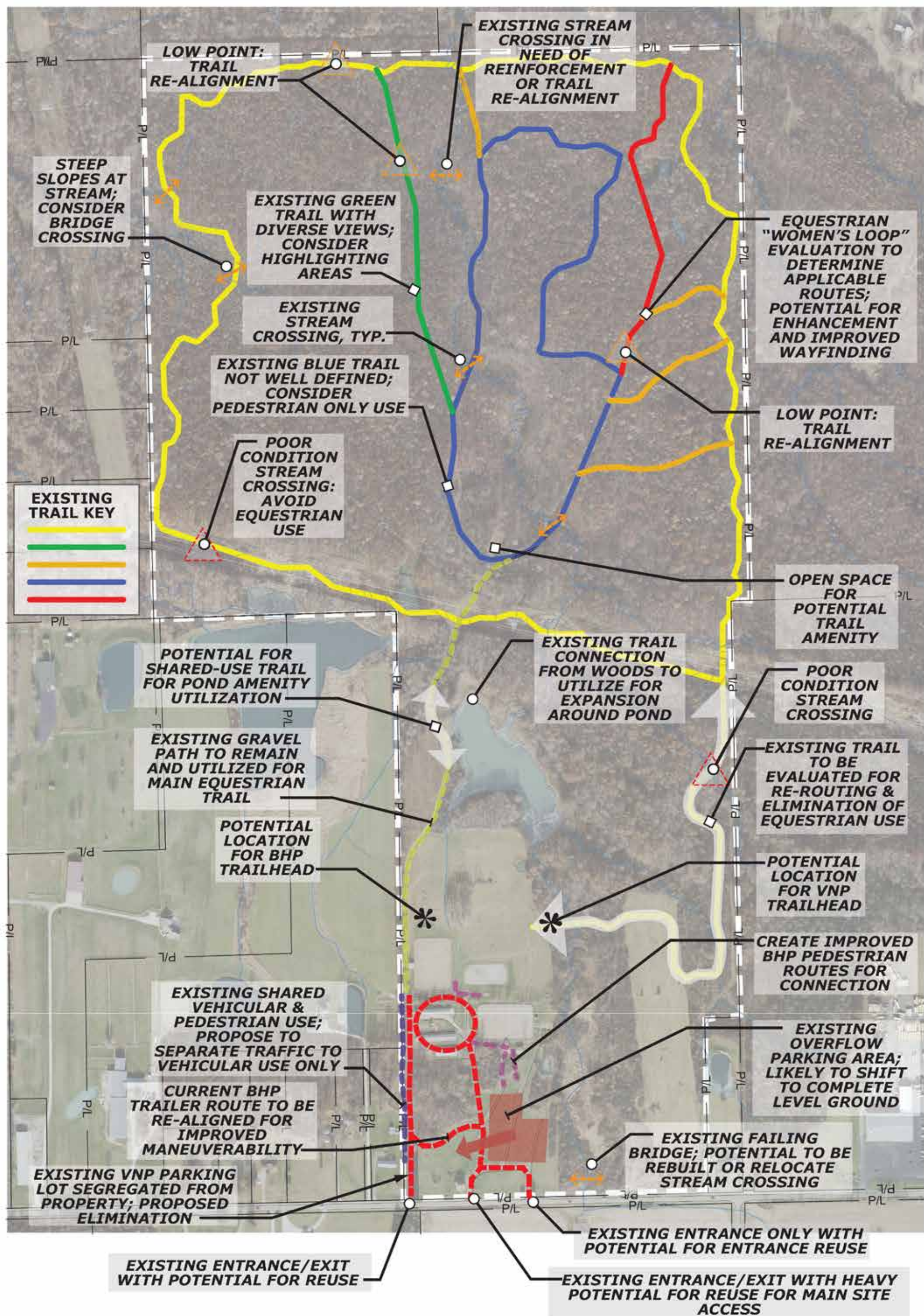
ESTIMATE AND 05

COST ESTIMATE

	TASK	CATEGORY	QUANTITY	UNITS	COST PER	COST
1	Earthwork Excavation / Embankment / Haul Off Subgrade Compaction	Parking	1,888 11,335	CY SY	28 1.25	\$52,864 \$14,16
2	Gravel Drive and Trailer Parking 6" Aggregate Base – ODOT 304 2" No. 57 Limestone Top Dressing	Parking	1,334 445	CY CY	65 65	\$86,710 \$28,925
3	Asphalt Parking Lot and Drive Compacted Limestone Aggregate Base Asphalt – Surface Course Type 1 (1.5") Asphalt – Intermediate Course Type 2 (4.5")	Parking	554 138 416	CY CY CY	65 175 175	\$36,010 \$24,150 \$72,800
4	Clearing and Grubbing	Landscape	1	Lump Sum	12,000	\$12,000
5	3-Season Pavilion with Sandstone Columns	Building	1	Lump Sum	90,000	\$90,000
6	Restroom	Building	1	Lump Sum	60,000	\$60,000
7	Kiosk	Building	1	Each	6,000	\$6,000
8	Fishing Pier	Building	2	Each	5,000	\$10,000
9	Site Enhancement / Landscape	Landscape	1	Lump Sum	10,000	\$10,000
10	Nature Play and Picnic Area	Other	1	Lump Sum	10,000	\$10,000
11	Pedestrian Trail Only	Trail / Walkway	4,753	Linear Feet	35	\$166,355
12	Multi-Use Trail	Trail / Walkway	4,588	CY	65	\$298,220
13	Stream Crossing	Trail / Walkway	16	Each	4,800	\$76,800
14	Native Restoration	Landscape	16	Acre	5,000	\$80,000
15	Bioretention (includes soil and seed)	Landscape	2,400	Square Feet	22	\$52,800
16	Playground Area	Landscape	1	Lump Sum	95,000	\$95,000
17	Sandstone Columns	Other	8	Each	3,000	\$24,000
18	Equestrian Gateway	Other	1	Lump Sum	12,000	\$12,000
19	Relocation of Barnstone	Landscape	1	Lump Sum	2,500	\$2,500
20	Signage (entry sign, trailhead with wayfinding, and direction signage)	Other	1	Lump Sum	10,000	\$10,000
21	Split-rail Fence	Other	500	Linear Feet	40	\$20,000
22	Bleachers	Other	3	Each	15,000	\$45,000
23	Miscellaneous Site Amenities	Other	1	Lump Sum	20,000	\$20,000
Subtotal for Construction						\$1,349,270
Contingency (20%)						\$269,854
Project Total						\$1,619,124

Note: In providing opinions of probable construction cost, the Client understands that the Design Professional has no control over costs of the price of labor, equipment of materials, or the Contractor's method of pricing, and that the opinions of probable construction costs provided herein are to be made on the basis of the Design Professional's qualifications and experience. The Design Professional makes on warranty, expressed or implied, as the accuracy of such opinions as compared to bid or actual costs.

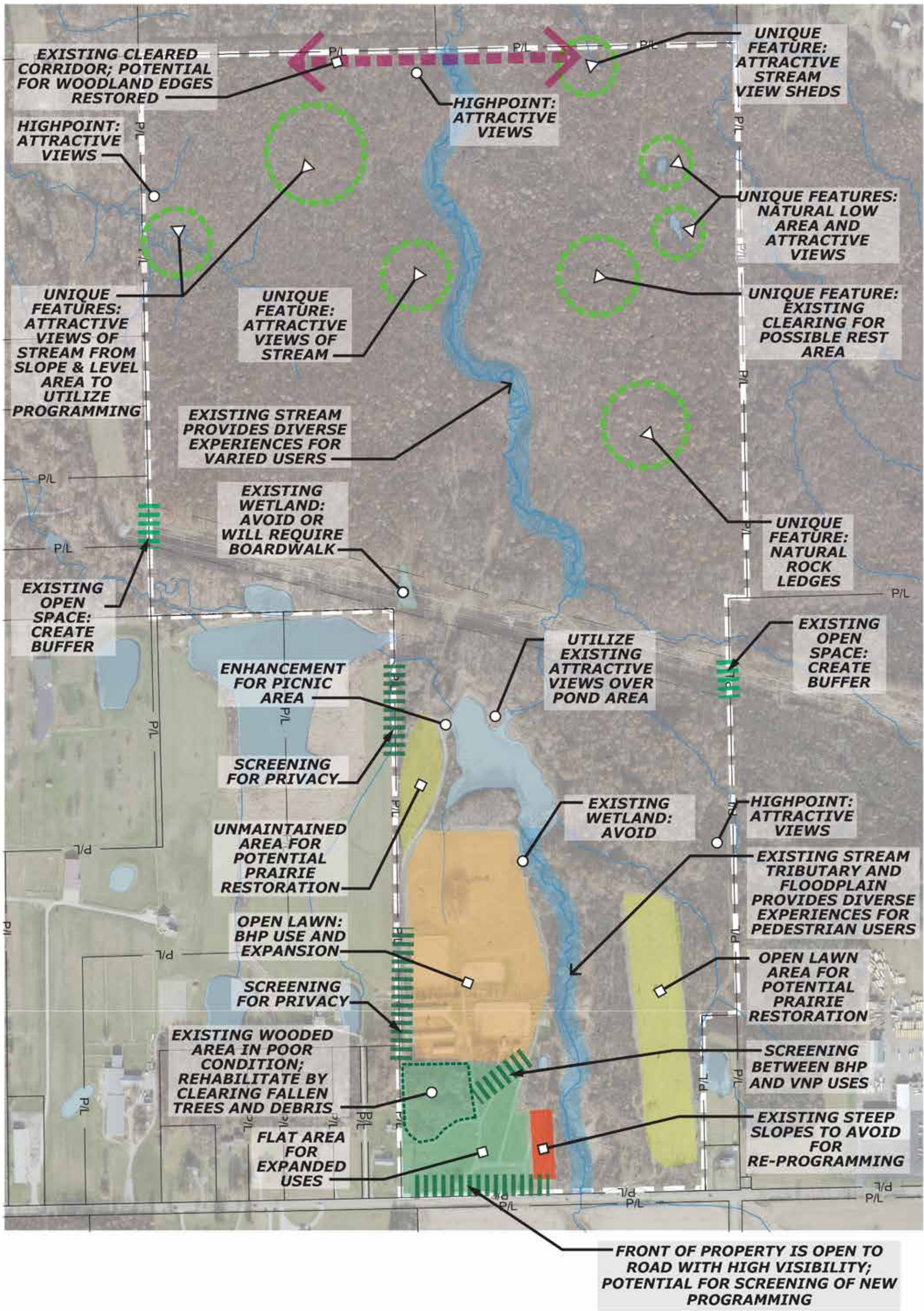
APPENDIX A



CIRCULATION & TRAIL ANALYSIS MAP

VICKERS NATURE PRESERVE MASTER PLAN
MILL CREEK METROPARKS

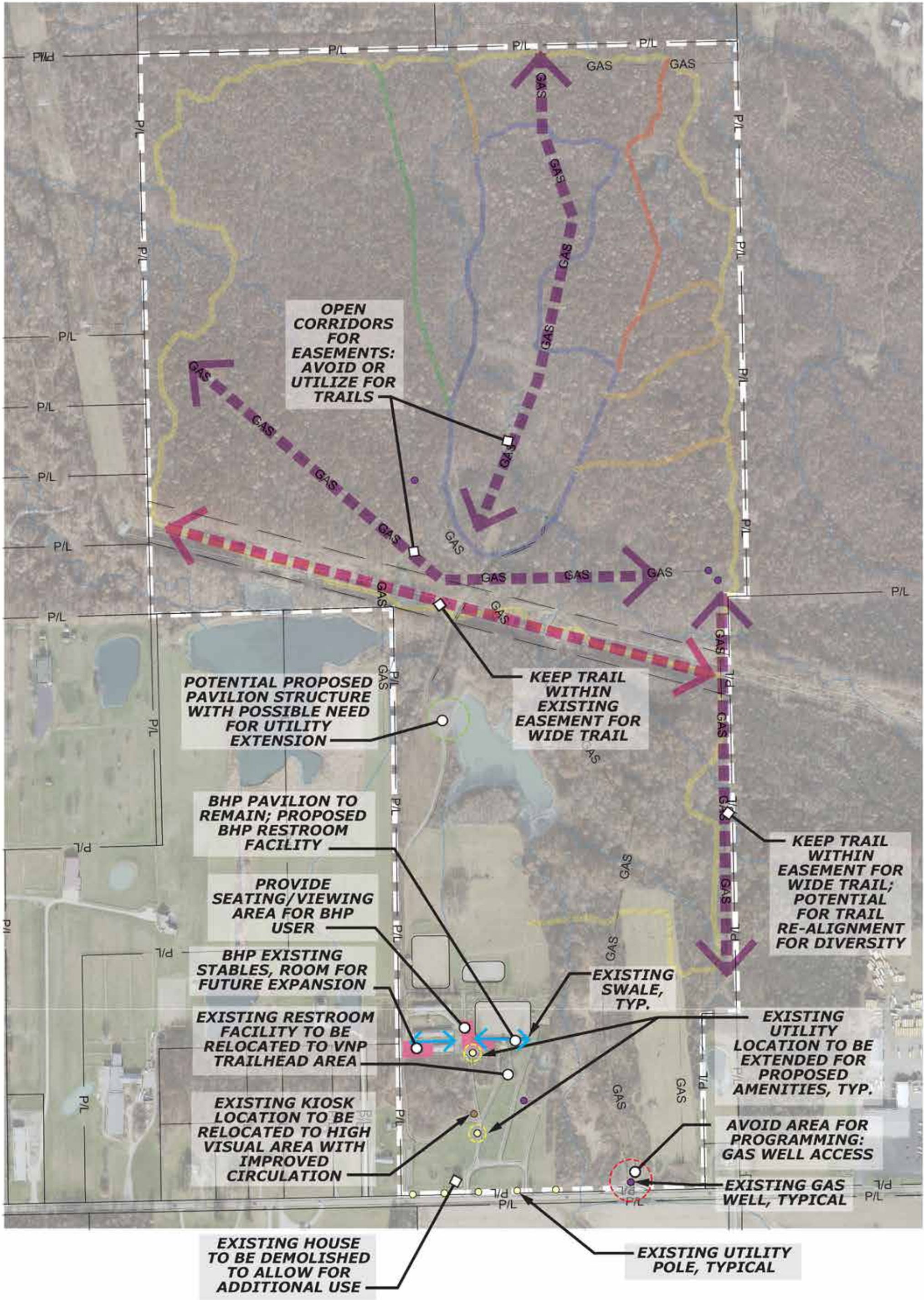
A.1



ECOLOGY ANALYSIS MAP

VICKERS NATURE PRESERVE MASTER PLAN
MILL CREEK METROPARKS

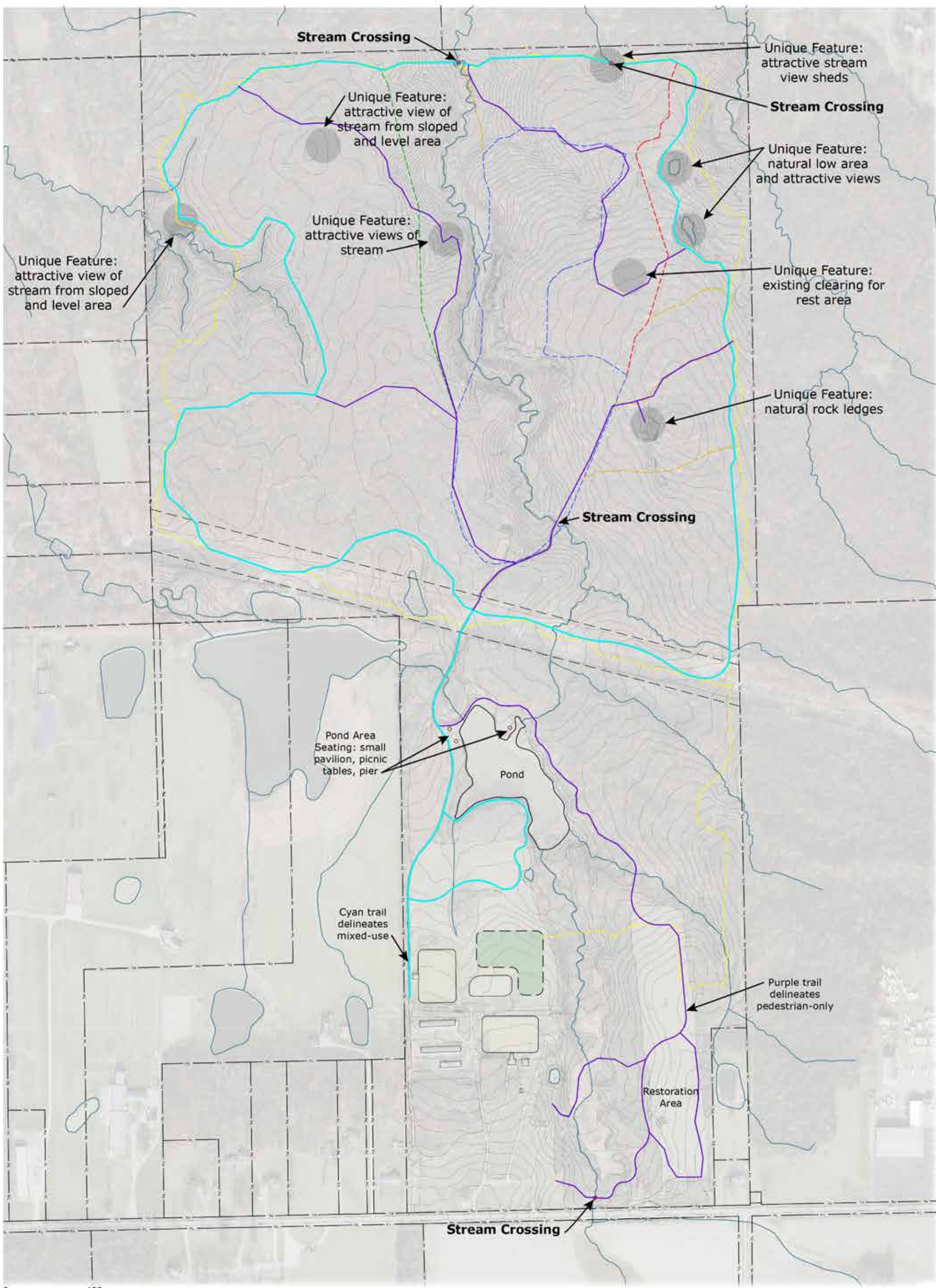
A.2



STRUCTURES & UTILITIES ANALYSIS MAP

VICKERS NATURE PRESERVE MASTER PLAN
MILL CREEK METROPARKS

A.3



PROPOSED TRAILS

VICKERS NATURE PRESERVE MASTER PLAN
MILL CREEK METROPARKS

A.4



THE COLORS AND MATERIALS SHOWN IN THIS RENDERING ARE CLOSE APPROXIMATIONS AND NOT AN EXACT MATCH. RENDERING IS TO BE CONSIDERED FOR VISUAL DESIGN INTENT ONLY AND NOT FOR CONSTRUCTION.



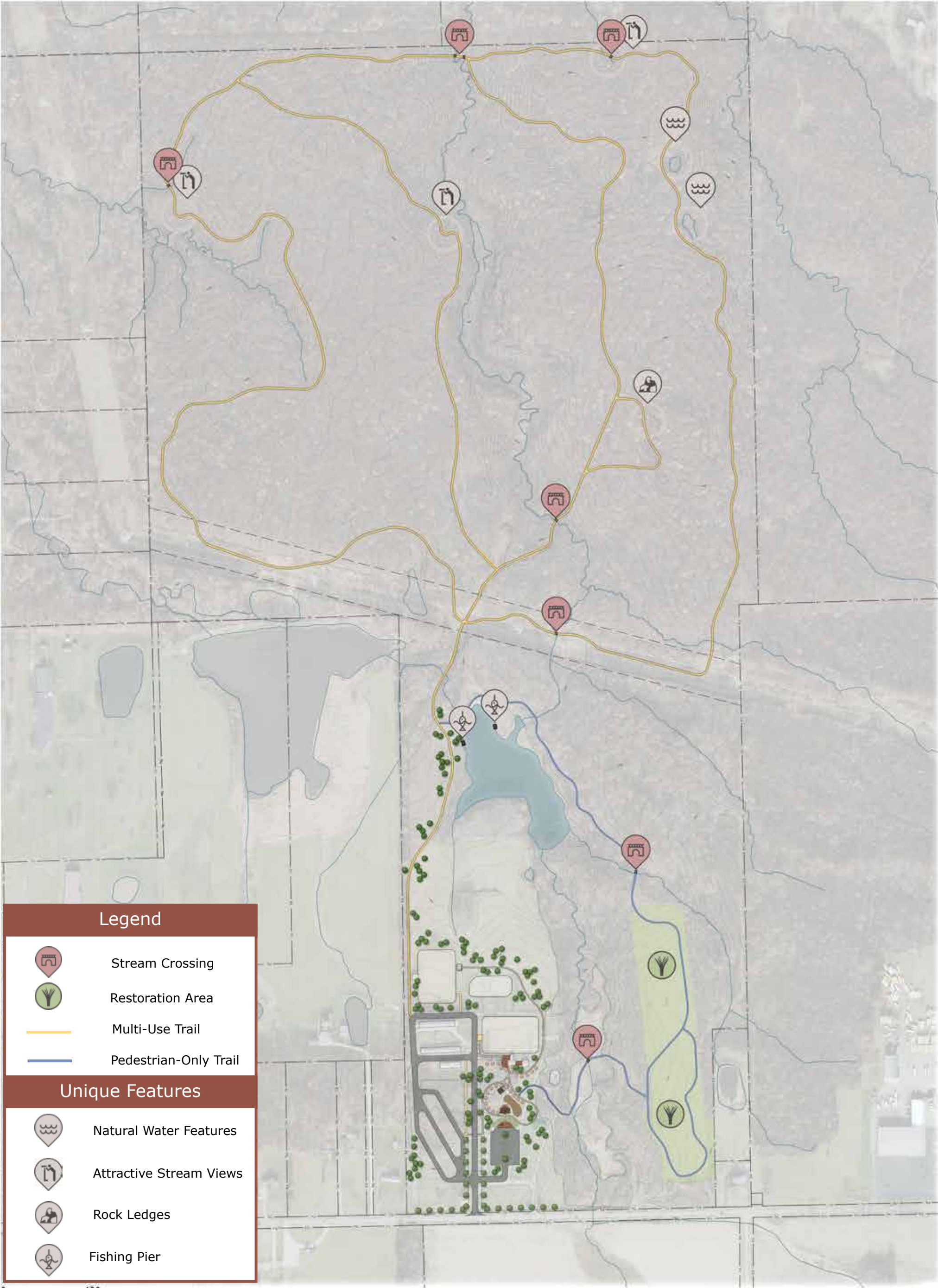
PREFERRED CONCEPT

VICKERS NATURE PRESERVE MASTER PLAN
MILL CREEK METROPARKS

A.5



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Legend

Stream Crossing

Restoration Area

Multi-Use Trail

Pedestrian-Only Trail

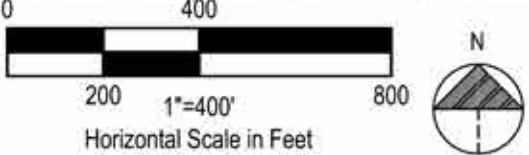
Unique Features

Natural Water Features

Attractive Stream Views

Rock Ledges

Fishing Pier



PROPOSED TRAILS

VICKERS NATURE PRESERVE MASTER PLAN
MILL CREEK METROPARKS

A.6



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MASTER PLAN

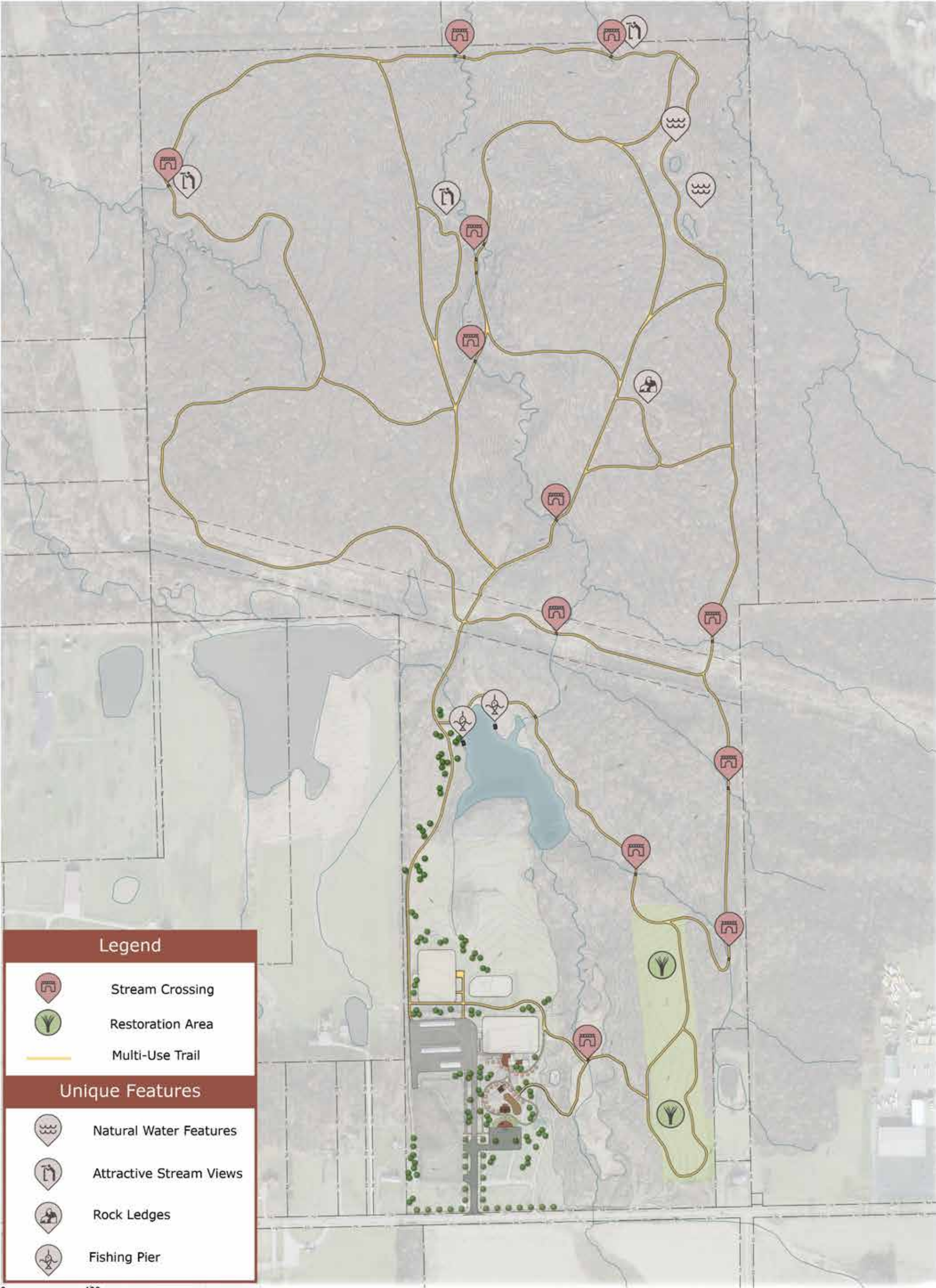
VICKERS NATURE PRESERVE MASTER PLAN
MILL CREEK METROPARKS

A.7



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PROPOSED TRAILS

VICKERS NATURE PRESERVE MASTER PLAN
MILL CREEK METROPARKS

A.8